From the Editor

Tara S. Behrend

My undergraduate mentor, Richard Moreland, recently passed away. Dick was not an I-O psychologist—as he put it, he was a social psychologist who liked to dabble in I-O. His work in the area of team processes and newcomer socialization is hugely influential in the social sciences and has been recognized by every major honor and award imaginable. To me, though, Dr. Moreland was an incredibly generous and devoted teacher, and a kind and gentle person. I had no idea how famous he was when I wandered into his office in 2002, looking for research experience. He set me up with a project, coding interviews about recruitment source effects. As he explained, there were two possible explanations for why word-of-mouth recruitment worked better than formal recruitment. It was a puzzle—and I got to help figure out the solution! I threw myself into the task. At the end of the semester, we analyzed the results together (using Minitab, no less) and made a poster. I remember that it was late into the night on a Sunday before he was satisfied that the margins on the poster looked good enough for me to present at our department's research fair. Because this was before the days when Microsoft would automatically justify your margins for you, we had to use trial-and-error, adding or shortening words until they all lined up just right.

When I think of how generous he was with his time, how patient, and how humble, I am inspired to be more like him. I was just one of dozens of undergraduates who benefited from his wisdom and good humor. Once, his graduate students complained to him that my loud laugh was distracting them. He told me to ignore them—it was important to have fun when doing research. In his position, I can't say I would have done the same (though I'm sure my current office neighbors wish he would have nipped that in the bud).

I am grateful that I was able to tell Dick how much I appreciated his mentorship, and what a strong influence it had on my development as a researcher. I saw him in 2008 at the INGroup conference. I didn't expect that he would remember me, considering the large numbers of students he worked with. We hadn't kept in touch. Not only did he remember me, but he remembered the project we worked on together and proudly described it to his colleagues. I'm sure he had no idea how much that meant to me.

Dick Moreland was not an active SIOP member, but he was a multidisciplinary thinker and scholar who has influenced several generations of SIOP members. He was also an example of the kind of academic we might all try to be more like: human, kind, and devoted to others.

This issue of *TIP* will remind you that SIOP is full of kind and generous people who devote their time and energy to improving our profession and improving society. We welcome new President **Talya Bauer** in her first president's column. We have **Allie Gabriel's** final column for the Academic's Forum—I'm pleased that she has found an outstanding replacement in **Dorothy Carter,** but sad to see her go! New Bridge editors **Kimberley Adams** and **Stephanie Zajac** present a terrific and informative column from **Kelley Slack** and **Lacey Schmidt** about teamwork training. In the International Practice Forum from **Lynda Zugec** and **Walter Reichman**, we learn about a women's leadership development program run by **Peter Scontrino** in Bali. In Max Classroom Capacity, **Loren Naidoo** interviews **Donald Truxillo** about his recent Distinguished Teaching Award. These are just a few example of people we can hold up as exemplifying the best of SIOP.

This issue of *TIP* also has a surprise inside—the return of The High Society. This long-running column from **Paul Muchinsky** was a source of joy for many years, and *TIP* hasn't been the same without it. I'm

delighted to report that **Nathan Carter** has taken up the reins as SIOP's roaster-in-chief for a new generation. As you'll see in his column, Nathan was profoundly influenced by Paul; an email that probably seemed trivial to Paul was anything but trivial to Nathan. Another reminder of the ways we can affect others without awareness.

I hope you enjoy this issue; if the content inspires you, please tell the authors! Send all complaints to me at behrend@gwu.edu.

The President's Message

Talya Bauer

It is a great honor to be representing SIOP both internally and externally. I began volunteering for SIOP in my first month of graduate school, and I have continued to do so since. However, as I learned more and more about how each role and committee was nested into the larger SIOP governance ecosystem, it felt like layers of an onion were being peeled away bit by bit. I would like to take a moment to reveal some of the SIOP onion for all of you reading this column. I think knowing what goes on behind the scenes helps me appreciate SIOP even more. If this isn't for you, please skip ahead. I promise my feelings won't be hurt!

Volunteering and SIOP Governance Structure

SIOP is governed by our bylaws (voted upon by SIOP members and fellows), and our structure is an executive board comprising elected officials including the presidential trio, the Financial Officer/Secretary, 8 Portfolio officers, and our APA Council representatives. We currently have four APA reps, but this number fluctuates depending on how many APA members SIOP has.

The eight Portfolio officers oversee a wide variety of tasks and committees. At last count, SIOP had 55 active committees and task forces. Quite literally, thousands of individuals volunteer to help make SIOP run smoothly and professionally every year. The eight Portfolios are as follows:

- Communications
- Conference and Programs
- External Affairs
- Instruction and Education
- Membership Services
- Professional Practice
- Publications
- Research and Science

The SIOP Executive Board and Committee Chairs. Pictured here are just some of the folks powering the SIOP engine.

The last year as president elect was a whirlwind, and it went by quickly. However, in reflecting back, the 3-year term of president elect, president, and immediate past president (affectionately referred to collectively as the *presidential trio*) works well for SIOP governance and continuity. In the past year, I went from zero to 60 as **Fred Oswald, Mort McPhail**, and I conferred, debated, and decided a large number of issues regarding challenges and opportunities facing SIOP—and we also kept the trains running. In Mort and Fred, I found two amazing colleagues who are thoughtful, supportive, passionate, and steadfast stewards of the trust placed in them by the membership of SIOP.

One of the major responsibilities of the president elect is the appointment and onboarding of new chairs and chairs-in-training. This is kicked off via a training session on the Sunday after the Annual SIOP Conference. I was thrilled to have the opportunity to help make our onboarding process more effective, and I asked **Donald Truxillo** (University of Limerick/Portland State University) and **Julie Olson-Buchanan** (California State University, Fresno) to lead the training. They took the previous training, which contained 138 slides of materials, and cut it back to the essential 40 or so slides. Because they got through so much material so quickly, we were able to dedicate large blocks of time for goal setting and team building both within and across committees.

One of the most salient activities (and biggest volunteer activities of the year) is our Annual Conference, where nearly half of our entire membership attend sessions. The conference touches so many of us and is a confluence of so much of the other portfolios. The behind-the-scenes roles that keep the conference running are truly something to watch in action. This year's conference in Chicago did not disappoint!

Fred Oswald, Eden King, me, ***Emily Solberg, Steve Ashworth****, and* ***Will Shepherd***

Thank you to everyone who continues to volunteer to help make SIOP better!

Initiatives for the Coming Year

Looking forward at the year to come, I am excited about all the amazing momentum we have following a spectacular conference in Chicago and working with **Eden King** (president-elect) and Fred Oswald (past president). In my closing plenary I shared three example projects to illustrate the multipronged approach I am taking to work toward SIOP's vision, "***To be recognized as the premiere professional group committed to advancing the science and practice of the psychology of work.***"

I am also excited to bring SIOP's four strategic goals to life:

1. *Become the premier and trusted authority on work-related human behavior.*
2. *Increase the awareness and use of I-O psychology.*
3. *Meet the needs of those engaged in the science and practice of I-O psychology throughout their careers.*
4. *Model and reinforce the effective integration of science AND practice*.

The following are some of my key initiatives for the coming year in support of these goals.

The GIT Task Force: Building a Strong Foundation

Compared to other disciplines like physics and philosophy, I-O is a relatively young discipline, but we have made incredible strides in a relatively short period of time. As we are focused on our future, we need to take steps to protect our valuable foundation of science and practice. Without I-O graduate programs training for our next generations of I-O psychologists, we will fail to survive. One key factor is supply and demand. If students are clamoring for I-O psychology, we are in a much stronger position than if they continue to "stumble upon us" as so many of us did on our way to I-O and SIOP. At a fundamental level, getting I-O psychology content included in undergraduate introduction to psychology courses is an important step toward this goal. Although SIOP has worked to tackle this issue before, and great work has been done, we are now taking a long-term, multipronged approach starting with formation of the *GIT Task Force* (Getting I-O Into Intro Psych Textbooks). **Joe Allen** (University of Nebraska), who is rotating off a hugely successful term as chair of Education and Training, has agreed to chair this task force. The dream team he has assembled includes **Georgia Chao** (Michigan State University and SIOP APA Representative), **Nicholas Salter** (Ramapo College of New Jersey), **Jennifer Gibson** (Fors Marsh Group), and **Debbie DiazGranados** (Virginia Commonwealth University) with **Mikki Hebl** (Rice University and past Education and Training Committee chair) as a consultant to the committee based on her past work in this area.

In addition, I am working with **Roni Reiter-Palmon** (University of Nebraska- Omaha) and the Bridge Builders subcommittee to organize a volunteer drive to have hundreds of SIOP members volunteer to give talks about I-O psychology and SIOP in AP Psychology classrooms around the country. Please stay tuned for more on this later this summer in time for the fall term at high schools.

The SPOT Task Force: Scaling SIOP's Secret Sauce

When I think about what separates SIOP from other professional organizations, I think one key factor is diversity. When we have well-trained, passionate, smart individuals doing work in a variety of diverse contexts work together, good things happen. Since my first SIOP conference in 1990, I have enjoyed and benefited by learning from, partnering with, and living vicariously through SIOP members in work contexts different from my own. The fact that those who spend their days in organizations, in educational settings, and in consulting capacities all work together within SIOP, and to cross-pollinate ideas, needs, and solutions, is special and powerful.

I formed the *SPOT Task Force* (Science–Practice Opportunities for Translations) to generate ideas on how to more powerfully and effectively scale this cross-pollination. I was thrilled when **Julie McCarthy** of University of Toronto agreed to chair the group and when **Paul Thoresen** (SIOP's Electronic Communication Committee chair), **Frederik Anseel** (King's College, London and EAWOP president), **Shonna Waters** (BetterUp), **Eduardo Salas** (Rice University), **Kathryn Dekas** (Google and head of Google's People Analytics PiLab), and **Lorenzo Galli** (Mercer Consulting and cofounder

Mo Wang showing off his SIOP spirit at the conference in Chicago.

of Science for Work) all agreed to participate. In addition, **Elizabeth McCune** (Microsoft and SIOP's Program chair-in-training) will be an ex-officio member of the task force. Work is underway to generate ideas and develop those having the greatest potential to move the dial on science–practice and practice–science translations.

My presidential theme of ***I am SIOP*** was born out of my desire to articulate what makes SIOP so special. I realized that it is simply all of you, with your diverse backgrounds and ideas. **Every. Single. Member**. You make SIOP. You are SIOP.

We are gathering ***I am SIOP*** photos. Please email them to comms@siop.org or upload them at goo.gl/EbU2JT

Thank you!

Relationship Building: Getting the Word Out About I-O and Amplifying Our Reach

A major emphasis of my presidency will be focused on ways that SIOP is made stronger through world-class science, practice, and science–practice partnerships and collaborations. As I envision it, one of the major obligations and tasks I have in front of me as SIOP President is to get the word out about I-O psychology and SIOP. In February, I began piloting the **I-O Roadshow** where I meet with individuals and organizations to do just that. While in Houston, I was able to visit with individuals at Quintela, Waste Management, and the U.S. Department of Veterans Affairs. And a highlight was meeting with SIOP members who work at NASA as well as touring behind the scenes at the Johnson Space Center. We visited the Space Vehicle Mockup Facility and the Christopher C. Kraft, Jr. Mission Control Center for the International Space Station in Houston. My host, Michael Hess, Acting Associate Center Director, NASA/Johnson Space Center, and I first met at a conference on science–practice collaborations and continued to share insights into our mutual interest of onboarding. While at NASA, I was able to chat about SIOP and go inside the International Space Station Simulators, including the Crew Cabin Trainer, the Russian Soyuz Trainer, and the Orion Medium Fidelity Trainer. In addition, I toured the JEM, Service Module, and FGB.

Good Things

I also want to offer appreciation call your attention to several good things that are happening as I write this. If you have something you would like to see highlighted here in future columns, please let me know.

- The Futures Task Force had a productive year. Led by **Alexis Fink** (Intel), they developed recommendations within five domains (Automation & Artificial Intelligence, Focus on Work, Multidisciplinary World, Big Data and Methods, and Tools and Technology). The task force became the ad hoc SIOP Futures Committee in April under the leadership of new chair **Richard Landers** (University of Minnesota). Their primary activities are conducting research to understand how work is changing, and developing and aiding the implementation of recommendations for SIOP.
- Speaking of the future, please be sure to check out the Practice Forum of SIOP's flagship journal *Industrial and Organizational Psychology: Perspectives on Science and Practice*. The June issue features a timely article on *The Looming Cybersecurity Crisis and What It Means for the Practice of I-O Psychology* by **Rachel Dreibelbis, Jaclyn Martin, Michael Coovert** (University of South Florida), and **David Dorsey** (HumRRO). I want to extend my sincere thanks to **Mark Poteet** (Organizational Research & Solutions) for bringing this forum to life with six articles published so far. I would also like to welcome Alexis Fink who has taken over from Mark as editor of the Practice Forum. Please consider submitting at http://www.siop.org/journal/PFGuidelines.aspx
- In July, several of us will meet in DC for the annual SIOP–Lewis-Burke retreat. Fred Oswald is continuing to lead the charge on the work done to identify and promote key areas ripe for advocacy given SIOP's expertise and **Alex Alonso** (SHRM) is doing a GREAT job on the advocacy front for SIOP.
- Under the leadership of Tracy Vanneman (SIOP Administrative Office), SIOP was awarded the 2018 Gold Circle Award in the category of Sponsorship/Exhibits/Advertising Campaign, which was presented at the American Society of Association Executives (ASAE) Marketing, Membership Communications Conference in Washington, DC. Congratulations!
- SIOP is a registered nongovernmental organization with special consultative status to the United Nations Economic and Social Council (ECOSOC). As part of our work, the SIOP UN committee (chaired by Julie Olson-Buchanan) led three Innovation & Learning Brownbag Series topics and speakers. Thanks to our first round of amazing speakers, **Christopher Rotolo** (PepsiCo), **Tomas Chamorro-Premuzic** (Hogan), and **Doug Reynolds** (DDI), for representing SIOP so well on the world stage.
- Last year, the Committee for Ethnic and Minority Affairs (CEMA), chaired by **Kisha Jones** (Penn State University), launched a mentoring program connecting minority graduate students with established I-O mentors. They received an overwhelming response from people willing to serve as mentors with nearly 200 people volunteering. Approximately 85 mentoring pairs were created, and these pairs met (often virtually) once a month to discuss various issues. The mentoring sessions culminated with a successful reception at SIOP 2018 in Chicago. Thank you to all of our mentors and members who volunteered to serve as mentors!
- Although **Deirdre Knapp** recently moved out of her role of SIOP APA Council Representative, SIOP is fortunate to retain her expertise in agreeing to chair CAPE (Committee for the Advancement of Professional Ethics), a new ad hoc committee tasked with assessing and supporting professional development needs associated with addressing ethical challenges in the practice, research, and educator roles played by I-O psychologists. We look forward to their progress.

- As I submit this article, I am on my way to the **Association for Psychological Science** (APS) Annual Conference in San Francisco. They are anticipating 4,000 attendees. I am looking forward to it and to reporting back how fantastic it was.
- The Alliance for Organizational Psychology (AOP) brings SIOP, EAWOP, IAAP-Div 1, and CSIOP together, with the goal of promoting the visibility of I-O psychology worldwide. I will be attending the conference and next meeting of AOP at the 29th **International Congress of Applied Psychology** June 26-30, 2018 in Montreal.
- It isn't too soon to begin planning to attend the **Leading Edge Consortium** (LEC), which will be held October 19-20, 2018 in Baltimore, Maryland. The topic will be *High Potential: Identifying, Developing, & Retaining Future Leaders*. I hope to see you there!

Some Ways to Get Involved

- You are the face of SIOP. As noted earlier, we are gathering ***I am SIOP*** photos. Please email them to comms@siop.org
- If you know of any racial/ethnic minority graduate students who would be interested in participating in the CEMA mentoring program, please have them reach out to siopcema@gmail.com
- Finally, SIOP has two registries and a locator service. Please sign up if you are interested. It is another way to be involved and find others interested in similar things while making SIOP stronger.
    - *CSR and Pro-Social/Humanitarian I-O Registry*: http://my.siop.org/Services/CSR-Prosocial-Humanitarian-I-O-Registry
    - *Health, Safety, and Well-being Registry*: http://my.siop.org/Registry/HSWB
    - And the *Consultant Locator Service*: http://my.siop.org/cls
- It is also SIOP Volunteer Sign-up Season. To submit your volunteer preferences, please go here: http://my.siop.org/Membership/Committees/Volunteer-for-Committee (***hint:*** You'll need to be logged in to view the choices.)

Thank you all!

The Modern App:
Technology & I-O Crossovers: How Multidisciplinary Views Are Vital to Our Learning


Evan Sinar
DDI

Tiffany Poeppelman
LinkedIn

The scope of technology's influence—on how we work, buy, and interact—makes studying its impact an inherently multidisciplinary endeavor. SIOP's recent Future of Work task force identified the necessity of adopting multidisciplinary perspectives as one of the top forces impacting I-O psychology, alongside AI-driven automation, the changing nature of work, new data science methods, and emerging technology and tools (Fink, Battista, Behrend, Kolmstetter, Kraiger, & Macey, 2018). Despite these recommendations, as a field we often limit our sources, citations, and targets of the work we produce to the journals with which we're intimately familiar. This can be an acceptable approach for subject areas published primarily in I-O or business journals. However, it is a risky model for fast-advancing technology topics (or traditional topics being disrupted by technology) drawing research and conceptual attention from, and contributing to, fields outside our own—including from the field of information technology itself.

In this edition of The Modern App, we propose a multidisciplinary and data-driven approach to first identify technology-centric publications containing relevant content, and then extract learning from selected articles. As we will discuss, these technology-centric articles address topics closely matched to I-O's focus on people in the workplace, yet they are written with technology (and its foundational research) as a the primary focus and workplace secondary. This contrasts with I-O publications which, understandably given the charter of the journals in which they are published, have individuals at work as the central focus and technology as secondary. We feel that ultimately, the study of technology's impact will require a balance between these views.

Without drawing on the research and frameworks from the authors who know technology best, many of whom rarely or never publish their work in I-O journals, we won't succeed in understanding and conducting research on technology's impact more than we do now. While this approach doesn't negate the need for translational research applying technology concepts and models back to our own journals, we do contend that we as I-O psychologists can't and shouldn't expect to understand the workplace impact of technology without drawing on the research and theoretical base generated outside our field.

What Can We Learn From Leading Technology Journals?

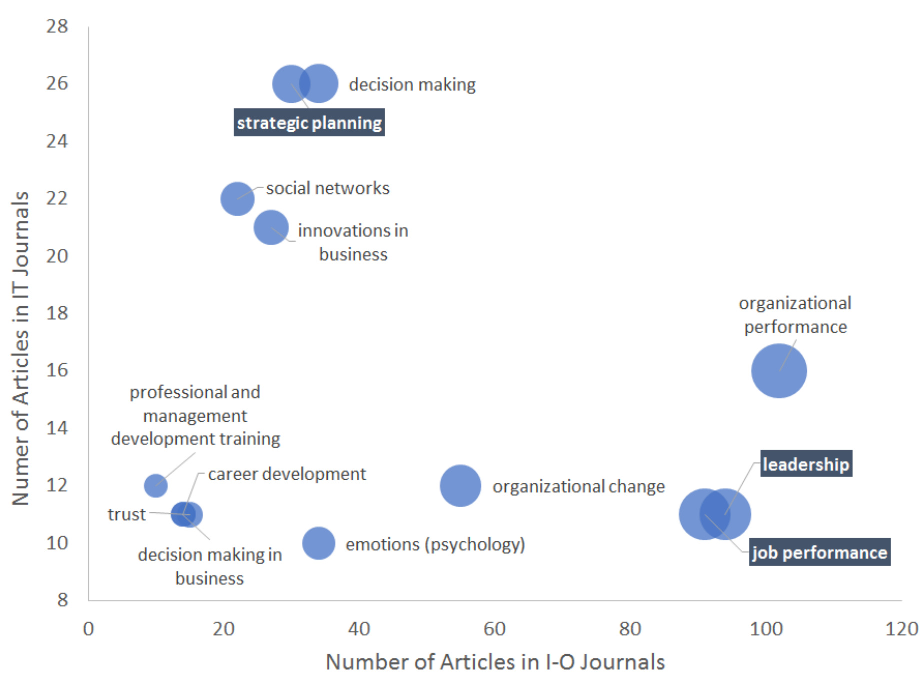
Our methodology, which we offer for both consideration and criticism, for identifying valuable and untapped opportunities for stronger technology-to-I-O knowledge exchange started by identifying 10 top technology-focused journals: *MIS Quarterly*; *MIS Quarterly Executive*; *MIT Technology Review*; *Journal of Information Technology*; *Information Systems Journal;* *Information Systems Research*; *Journal of Strategic Information Systems*; *Journal of Management Information Systems*; *Journal of the Association for Information Systems*; *Communications of the ACM*.

From the EBSCO database used by many applied and academic organizations (also available through SIOP; see http://www.siop.org/sra/), we exported all articles published in these technology journals from January 2016 through March 2018, totalling 2,223 distinct articles. The resulting datafile contains 33 metadata variables for each article, including article title, authors, affiliations, and the focus variable for this analysis, subject. EBSCO codes every article in its database using a series of subject terms (each article can be coded to multiple subjects)—among the most common terms for the technology publications are custom computer programming services, information storage and retrieval systems, artificial intelligence, wired telecommunications carriers, algorithms, social media, and blockchains. Importantly, EBSCO uses a uniform set of subject terms across all publications it indexes, allowing journals to be directly compared across disciplines.

We next exported a similar dataset for eight leading I-O journals, totalling 1,596 distinct articles: *Academy of Management Review*; *Administrative Science Quarterly*; *Journal of Management*; *Personnel Psychology*; *Journal of Vocational Behavior*; *Journal of Organizational Behavior*; *Organizational Research Methods*; *Journal of Applied Psychology*.

Because the two sets of journals use the same subject taxonomy, we next identified a set of crossover topics receiving attention from both technology and I-O journals (some subjects, such as custom computer programming services and internet security were exclusively found in technology journals, whereas other subjects such as group identity and organizational citizenship behavior were exclusively found in I-O journals). For the purposes of this analysis, we wanted to better understand subject areas with at least some (albeit typically unbalanced) coverage within both disciplines.

The bubble chart below summarizes the initial outcomes from our analysis, visualizing a subset of subjects with article coverage in each discipline. Subjects are displayed as individual circles. These circles are placed horizontally based on the number of articles published in I-O journals for that subject and placed vertically based on those articles published in technology journals for that subject. Circles are sized based on the total number of articles across both journal sets for the given subject.



To reduce the nearly-endless avenues for exploration using this approach, we've elected to showcase three subject areas in further detail: two (leadership and job performance) receiving heavy attention from I-O journals and a small but notable set of articles within the technology publications, and one (strategic planning) that was a moderate focus for many technology publications, yet very few from the I-O journals. We'll next review each of these subjects as exemplars with representative articles from technology journals and potential lessons these articles hold for I-O psychology.

Leadership (heavy attention in I-O journals; low attention in technology journals)

Article: Role of digital capabilities in unleashing the power of managerial improvisation (Levallet & Chan, 2018)

- **Brief summary:** Identifies and provides conceptual and case study examples of two organizational digital capabilities—flexible IT infrastructure and well-developed information management capability—that can advance "managerial improvisation."
- **Implications for I-O:** The article provides a framework for connecting digital technology systems to leader behaviors, innovation specifically. I-O psychology can use these concepts to discern and generate recommendations for employees and leaders seeking to better understand and proactively act on—for the benefit of innovation and adaptability—digital technology influences on the workplace.

Article: How LEGO built the foundations and enterprise capabilities for digital leadership (El Sawy, Kræmmergaard, Amsinck, & Vinther, 2016)

- **Brief summary:** Defines digital leadership as strategic actions to advance digitalization for the organization and the surrounding business environment. Characterizes the scope of digital leadership to include distinct perspectives on business strategy, business models, the IT function, enterprise platforms, mindsets and skill sets, and the workplace, using the LEGO Group as a case study example for the application of these concepts.
- **Implications for I-O:** Digital leadership is a high-interest topic in the business community, yet it suffers from a severe lack of conceptual clarity and measurement precision. I-O psychology can positively contribute to both of these goals while drawing on this article and others from technology publications blending qualitative, quantitative, and case study approaches to define digital leadership as experienced by and acted upon by major corporations.

Job Performance (heavy attention in I-O journals; low attention in technology journals)

Article: A nomological network of knowledge management system use: Antecedents and consequences (Zhang & Venkatesh, 2017)

- **Brief summary:** Clarifies the role—and often unfulfilled potential—of knowledge management systems (KMS) to improve employee-level job outcomes such as performance and satisfaction. Researchers used a blended qualitative and quantitative approach to identify help-seeking and help-providing purposes of KMS, as drivers of job outcomes.
- **Implications for I-O:** With escalating information demands placed on employees, knowledge acquisition, maintenance, and application increasing draws on technology systems to supplement individual capabilities. I-O psychology can adopt the techniques used by technology researchers to disentangle the roles of technology and employees in driving job performance and can guide talent management practices toward optimal and fair use of KMS and other technology systems, accounting for both organizational and individual perspectives.

Article: Use of online social networking services from a theoretical perspective of the motivation-participation-performance framework (Salehan, Kim, & Kim, 2017)

- **Brief summary:** Analyzes the interrelations among social networking service (SNS) motivational, participatory, and performance factors. Identifies a set of "why" motivations underlying SNS use, a pair of "how" ways in which employees participate in SNS at work, and a pair of outcomes (personal and job performance) of these services. Created and empirically supported a model of SNS motivation, participation, and outcome impact.
- **Implications for I-O:** This study advances the depth and scope of research into SNS use in the workplace, producing evidence-based guidance that I-O psychologists can incorporate into our practice, and extend through our research.

Strategic Planning (low attention in I-O journals; heavy attention in technology journals)

Article: Creating value in online communities: The sociomaterial configuring of strategy, platform, and stakeholder engagement (Barrett, Oborn, & Orlikowski, 2016)

- **Brief summary:** Explored the ways in which online communities (OC) create value over time, through a longitudinal field study of such a community in a healthcare organization. Defined OC's value as arising from an integrated configuration of strategy, digital platforms, and stakeholder engagement, and culminating in financial, epistemic, ethical, service, reputational, and platform forms of value.
- **Implications for I-O:** As I-O psychologists, our work often targets either a micro or macro level of analysis to gauge the impact of organizational interventions. These approaches may be misaligned or insufficient in the context of technology's enterprise-wide stakeholder groups and widely varying aspects of value these systems produce. We can draw on studies such as this one to design research, and implement practices, that take into account an appropriately comprehensive view of technology's impact, influences, and sources of value.

Article: Datification and its human, organizational, and societal effects: The strategic opportunities and challenges of algorithmic decision making (Galliers, Newell, Shanks, & Topi, 2017)

- **Brief summary:** Introduces a special section of *The Journal of Strategic Information Systems* focused on algorithmic decision making and its ever-growing role in society: Despite the expanding influence of these algorithms, their personal and societal consequences remain insufficiently clear and extremely controversial. Outlines a research agenda and a structured set of key considerations for this topic area.
- **Implications for I-O:** I-O psychology is well-positioned to join and produce powerful contributions to this research agenda; as a discipline our scope of knowledge and influence is closely aligned with this line of thought and discussion: how data-driven decisions can be implemented with full awareness and consideration of their individual and organizational impact.

Connecting to SIOP's 2018 Workforce Trends

As another approach to connecting back to these trends and findings, we look further at our SIOP Top 10 Workforce Trends, which also show important links between the gaps and opportunities in what we know is impacting organizations. Based on each, we offer additional consideration based on the mapped trends below, and the exemplar articles above, along with where we can apply learnings to our work.

Strategic Planning and SIOP #5 Trend: Changing Nature of How People Work

Linked to the #5 trend this year "The Changing Nature of How People Work," we can see online communities are taking a major role in pushing the boundaries of the 9-to-5 desk jobs. Additionally, as big data and algorithmic decision making take shape, we see the methods for how people do work is continuously changing. By monitoring the technology trends, we can see an increased opportunity for I-O psychologists to assist organizations in determining how jobs will and should change along with ensuring the best possible outcomes.

Job Performance and the #9 Trend: Job Automation

The #9 SIOP workplace trend was "Automation of Jobs and Tasks," which relates well to the research on knowledge management systems (KMS). With our limited knowledge in how to apply and drive KMS in the workplace, we may risk missing out are bigger opportunities that can increase employee job performance. Additionally, with automation looming in the years to come, it could be the application of KMS that get us there faster. With technology innovations moving faster than imagined, we will need to help develop and train employees as work demands and tasks change.

Leadership and the #7 Trend: Leadership Improvement

Related to the #7 SIOP workplace trend "Leadership Development and Improvement" is the leadership trend spotted in the analysis above. Based on what was highlighted in the research, we can see the digital leadership skills are showing an evolution in the way companies are fostering their most senior execs and management. Adapting to the changing landscape shows us the methods being utilized and others we can test or support in the workplace.

Overall, the aim of this issue was to highlight opportunities to extend this approach of validating across various publications and multidisciplinary focus to strengthen the connection between future I-O research and practice and outside sources, most notably the technology journals cited above (and the authors, potential research collaborators, publishing within them). Building on these concepts, our intention is to use the next Modern App column to explore additional areas using the dataset above.
If you have a preference and want to vote on specific topic above, message us and let us know! We also welcome suggestions on how to expand and improve on the first-attempt approach described above.

Contact us on LinkedIn: Evan Sinar & Tiffany Poeppelman

Contact us on Twitter: @EvanSinar & @TRPoeppelman

Interested in reading other past issues? Below is the full set and topics of our Modern App columns since January 2017:

- 2017 Technology Trends: Are I-O Psychologists Prepared? – January 2017
- #SIOP17 Program Preview: Technology Roundup for Orlando – April 2017
- #SIOP17 Review: Technology Takeaways From Orlando – July 2017
- Modern App: Don't Believe (Most of) The Technology Hype – October 2017
- The Modern App: How Technology Is Advancing Team-Centric Work – April 2018

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The Bridge: Connecting Science and Practice

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"The Bridge: Connecting Science and Practice" is a *TIP* column that seeks to help facilitate additional learning and knowledge transfer to encourage sound, evidence-based practice. It can provide academics with an opportunity to discuss the potential and/or realized practical implications of their research as well as learn about cutting edge practice issues or questions that could inform new research programs or studies. For practitioners, it provides opportunities to learn about the latest research findings that could prompt new techniques, solutions, or services that would benefit the external client community. It also provides practitioners with an opportunity to highlight key practice issues, challenges, trends, and so forth that may benefit from additional research. In this issue, we explore how to translate the science and theory behind teamwork into practical training interventions with Kelley Slack and Lacey Schmidt of Minerva Work Solutions, PLLC (aka Minerva).

Teamwork Training: Where Science's Rubber Meets the Practitioner's Road

Kelley Slack and Lacey Schmidt
Minerva Work Solutions, PLLC

Overview of Minerva

After working with NASA to train astronauts for long-duration spaceflight missions for several years, Kelley and Lacey (along with **Kathryn Keeton** and Andrew Fritz) cofounded Minerva as a public benefit company (PBC) to provide evidence-based teamwork and leadership development interventions, especially to nonprofits, government agencies, and small businesses. As part of a PBC, Minerva's consultants donate 30% of their time to helping charity organizations do more meaningful and effective work. Much of Minerva's consulting (paid and pro-bono) involves helping leaders translate research and theory into sound team building and teamwork training applications.

Q&A With Minerva

To best explore how Minerva is using science and theory in their teamwork training interventions, we asked them to address several questions.

What are the key takeaways from the teamwork literature that you have used in practice?

As practitioners who have been involved in NASA astronaut training and selection, our use of theory is strongly colored by our extreme environment experience. We need to create teamwork and leadership interventions that maximize teams' abilities to both live and work together. We also need to create training that allows multiple levels of teams to quickly prioritize and reprioritize goals as unpredictable events occur—sometimes the team must trade in all goals to achieve a safe mission or individuals must trade priorities to enhance the team's performance. Additionally, our key takeaways are shaped by our knowledge of the "innovation paradox" that confronts all organizations operating in extreme environments—innovation is encouraged because it is sometimes required to ensure team safety in unexpected situations, but the fear of real environmental dangers sometimes limits willingness to innovate unless a significant threat looms (e.g., Apollo 13). Although our perspective may be a bit unique, we have found key takeaways that are likely universally applicable. Five highlights are:

1. **Multilevel teaming concepts and modeling are "where it's at."** Analyzing Antarctic Research Expedition teams back in 2001 forced us to start thinking about individual, team, and event level variances in team performance. Almost all the teams we look at now are embedded within teams of teams, and most individuals are indeed members of many teams. It is clear that I-O practitioners must embrace the multilevel nature of teamwork if we want to design interventions that result in the multifaceted returns on investment that organizations rightfully expect.
2. **Nomological nets and how you talk to others about teamwork matters.** The many presentations **Scott Tannenbaum** and **Eduardo Salas** have given to different trade audiences to explain their seven drivers of team effectiveness opened our eyes to the beauty of sticking to a single, simplified lexicon. The "seven Cs of teamwork" gave us a memorable framework that was easy to explain to physicians, pilots, mechanics, engineers, and chefs, as well as our varied multidisciplinary research partners. The nomological net makes it easier to sell the psychology and our ideas about training teams.
3. **Golden takeaways are hiding outside I-O psychology.** Military research, other branches of psychology, communication, and engineering have a lot of practical hints and takeaways that need to be read and gleaned by practitioners. By reading widely we discovered things like facilitated debriefing, team dimensional training, crew resource management, motivational interviewing, and resilience findings that all necessarily informed how we talk about teams, study teamwork,

and design interventions that result in multifaceted positive outcomes and returns on investments for organizations operating in extreme environments.

4. **Do not fall for the old saying that "there isn't any research about it yet."** We reinvent the wheel too frequently because we fail to find existing interventions supported by evidence. Search widely and regularly for meta-analytic evidence across disciplines, and stay flexible enough to ask yourself questions like, "How is this research domain related to a team's adaptability?" and "What does that say about how we should conduct teamwork training?" We also find that going to multidisciplinary gatherings or industry (e.g., healthcare) talks about teamwork helps us hear about the research and interventions that professionals outside of I-O are building and provide hints about where to dig deeper in other literatures.
5. **Persistent takeaways are now in our own literature.** Recently, McEwan and colleagues (2017) identified meta-analytic evidence for four takeaways we have seen in our consulting experiences too: (a) teamwork competencies are interrelated and best trained in clusters (e.g., communication and situation awareness); (b) training individuals in transportable teamwork skills helps improve performance; (c) training teamwork skills in teams (even if it is not the usual team) in an experiential context (e.g., technical simulation) helps improve performance even further; and (d) getting teams to continuously observe and debrief teamwork is a key to enduring and continuous performance improvements.

Have you found teamwork theory to be difficult to apply to practice? In what ways?

This may sound obvious, but the most difficult part about applying teamwork theory to practice is that it is theory. Theory sometimes helps explain why something happens or helps us predict what is most likely to happen in general, but it does not usually describe how things work on a granular level or for a particular person or team in a specific context. As practitioners, we use theory to make our best educated guesses about what that means for designing a particular intervention for a specific team. At times, we have found it very difficult to interpret what theory means about coaching actual behaviors (e.g., just saying it is very important to communicate clearly does not help Mission Control and astronaut teams learn the actual behaviors associated with good team communication for a spacewalk). As psychologists, think in terms of behavior. What behaviors do those who excel in communication exhibit? What about behaviors for poor communicators? As we, at Minerva, ask ourselves those questions, we utilize the critical incident technique (Flanagan, 1954) to collect behaviors that typify performance at all levels of communication. Then we create behavior-based measurement tools that can be used to teach and coach effective communication.

Another challenge with applying theory to practice is translating it into universal lay speak. For example, psychologists think of personality and attitudes as two very different things, but many physicians we work with think of them as interchangeable terms. Figuring out these weak points in translation is critical because we have learned that we must partner with other teamwork experts in the context to achieve worthwhile interventions. Although these experts have different models of teamwork and speak different team theory languages, this is really an asset to application. The things that hold true in every model, and clearly resonate in all translations, have turned out to be the things that are most worth spending time to develop interventions around.

Explaining (and selling) the complex statistical concepts required to design effective teamwork training is another lay speaking challenge. We have found that using visuals and metaphors helps. For example, the importance of a random sample can be explained in terms of using a flashlight to illuminate a dark room

to expose its contents, where the room is the population and the area lit is the sample. What is illuminated depends on where the flashlight is shone; and, a larger light, like a larger sample, exposes more of the room. As practitioners, we can help one another by finding and sharing metaphors that work well enough to help you explain the latest teamwork theory to your great grandmother.

How can what you gleaned in practice better inform the theory?

Ideally, there is a reciprocal nature between research and practice. What is learned in research is transferred into practice and issues that arise in practice become the focus of future research. This does not always happen, hence the scientist–practitioner gap. As practitioners who pride ourselves on offering evidence-based solutions to our clients, we also have a strong interest in research. What we see in our practice sparks ideas (e.g., Keeton, Schmidt, Slack, & Malka, 2012). When we find ourselves asking questions about what we have experienced, we conduct our own research or reach out to a colleague in research. We let our practical experiences guide our research questions. For us, practice provides a context for theory.

NASA is a stellar example of reciprocity and interdependency between research and operations. Although a mission to Mars is not slated until the mid-2030s, NASA has been hard at work for years identifying and reducing the risks associated with long-duration exploration missions. NASA's Behavioral Health and Performance Research Laboratory (BHP Research) is responsible for evaluating three risks to human spaceflight: behavioral health, teams, and sleep and fatigue. Of course, teams are of interest to us as I-O psychologists. Research at NASA is purposefully multidisciplinary though. Many of the issues associated with human spaceflight cannot be fully understood without looking beyond the evident. Radiation, for example, can affect neurological functioning and thus could affect the ability for a crewmember to work effectively as part of a team. So, not only do we need to promote interdependency between scientists and practitioners, we also must actively reach across disciplines to ensure we fully understand an issue and its implications.

At Minerva, we are currently investigating humor. The interest in humor arose when one of us noticed cultural differences in the application of humor for crews wintering over in Antarctica. Affiliative humor seemed beneficial, increasing team cooperation and morale, regardless of national culture. We were able to add a measure of humor to other research being conducted at HI-SEAS, an extreme environment analog. Together with an industrial engineer who was a past crewmember of a HI-SEAS mission, we are analyzing the relationship over time between styles of humor and stress using biodata such as cortisol and data gathered from wearable devices such as heart rate, sleep, and activity. What one of us noticed and wondered about in practice led to our current investigation of humor and its role in a team's social climate. The results from this research will be fed back into how we coach leaders and teams to use humor.

How have you communicated the value of teamwork and teamwork research to those not familiar with the practice of I-O?

Before you can communicate the value of teamwork to a potential client, you have to be clear in your own mind what teamwork is. Pick a philosophical definition and stick to it. For Minerva, teamwork is employed by a group in which members have a shared goal and must share some tasks to achieve that goal.

Regardless of how firmly held your definitions are, you and your client are unlikely to have the same definition initially. Tell your potential clients how you define teamwork and, when possible, be specific with your terminology. Instead of using the more generic term "teamwork," talk about communication when communication is the issue. Link your discussion of communication to teamwork gradually over time.

Starting with specific terminology helps clients more quickly identify and understand how change can be implemented.

When you have shared definitions, you can begin to communicate the value of teamwork and teamwork research to those unfamiliar with I-O psychology. This communication must occur at multiple levels and time points. When talking to management, we find their "pain point"—the reason our services are required. We can then speak to them about teamwork in the language of their pains. For example, crew safety is the reason for NASA's tagline of "failure is not an option." We speak to that by discussing how effective teamwork reduces the odds of errors compounding into failures. Handovers, when one work shift leaves and another replaces it, occur three times daily for each console (desk) in Mission Control. Each time a handover occurs, there is a risk of critical information being neglected. Teaching teamwork skills, like coordination and communication, along with best practices for debriefs, increases the safety of crew and station by reducing the likelihood of an error due to an omission or miscommunication during a handover.

Sometimes leaders accept teamwork research as sufficient evidence of teamwork's value, but most often not. To pinpoint and highlight the necessity of teamwork (and teamwork research), we often use an experiential simulation with low physical fidelity. Essentially a game but one that requires cooperation and coordination for the team to win. The simulation engages the players and allows them to practice team skills we know from research to be essential. Players can see improvement in their own performance as the simulations progress and thus see for themselves how teamwork behaviors are really the issue. A facilitated debrief using a research-based approach, such as Team Dimensional Training (Smith-Jentsch, Cannon-Bowers, Tannenbaum, & Salas, 2008), also provides an opportunity for players to discover and internalize how what they just practiced applies to their workplace. As a facilitator, this requires having some knowledge of how the industry and organization for which you are providing services defines and relies on teams.

What do you think are the emerging issues in the area of teams?

Although we understand that the various teams within a multiteam system need to work well together, we do not yet know how to assess and compare the synergies created by these teams of teams. Why are some teams of teams better at managing virtual work than others? Is there a significant difference in the time required for different types of multilevel teams to form, storm, norm, reform, and coordinate effectively? Also, we see individual engagement is tied to important outcomes and, on the organizational scale, engagement is being used as an indicator of climate. What does this mean for a team concept of engagement? How do we make sure our teamwork interventions foster individual engagement? How do we design our training interventions to help multiteam systems maximize their synergies? In sum, there are plenty of teamwork theory and intervention adventures on which to embark. Welcome to the learning journey. We're happy to trade tools and tales along the way.

Calling Potential Contributors to "The Bridge: Connecting Science and Practice"

As outlined in Poteet, Zugec, and Wallace (2016), the *TIP* Editorial Board and Professional Practice Committee continue to have oversight and review responsibility for this column. We invite interested potential contributors to contact us directly with ideas for columns. If you are interested in contributing, please contact either Kimberly at kadams6006@gmail.com or Stephanie at szajac@houstonmethodist.org.

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On the Legal Front: Parsing Big Data Risk

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The opinions expressed in this article are those of the author and not necessarily those of any government agency. The article should not be construed as legal advice.

Rewards and Risks

Big Data is often characterized by "3Vs:" volume (very, very big), velocity (generated fast and furiously), and variety (multiple sources, and types of data, both structured and unstructured). The Big Data phenomenon is the confluence of the data, sophisticated analytic methodology, and readily available computing power. Big Data is making its splash with I-O psychology. Given the coverage provided in the 2018 SIOP annual conference, there could have been a theme track, like "Machine Learning for the Masses." This is good news because the some of the more esoteric aspects of dealing with Big Data are becoming accessible thanks to the pioneers among us who have summarized and disseminated what they have learned. Part of this education has dealt with analytic methods applicable to "data big and small" (Putka & Landers, 2018), a call to I-O psychology that we now have more tools available, the better to answer questions of interest, and not only for data by the deluge.

The bad news is that the legal concerns over abuses of Big Data and analytic methods generally have not gone away. Insofar as these concerns are real issues, they should not simply go away until they have been addressed.

Risks: A First Cut

One simple division of the legal issues is between the data itself and the algorithms used to analyze data. Data issues involve collection, storage, and access: responsibility for security; who owns those bytes of data we continuously generate about ourselves; who has the right to harvest and sell them; what information we can choose to divulge for a specific purpose, but not for others. Besides privacy, there is the matter of accuracy. If the data are untimely, not attributed to the correct person at the individual level, not representative of the population of interest at the aggregate level, or simply full of reporting errors and miscodes, use of the data can have negative consequences, possibly severe, for the users and the objects of their use. Then there is the way the data are analyzed.[1] In some of the popular media, "algorithm" applied to personnel matters has become the boogeyman, an all-knowing yet mindless entity that that integrates information (or misinformation) with cold mathematical calculation, shape-shifting as it learns to use the data better, with complexity beyond the ken of mortals, to decide who gets jobs. A specific concern is equal employment opportunity (EEO) law: how the algorithm might be tapping into protected employee and applicant characteristics (e.g., race, sex, age, disability) in those decisions, or perpetuating the biases (unconscious or intentional) of its developers.

Finer Slices

Table 1[2] focuses on the dimensions of legal risk. It joins summaries touching on other aspects of Big Data risk. Privacy protection strategies were covered by Guzzo, Fink, King, Tonidandel, and Landis (2015).[3]

Handler, Bergman, and Taylor (2018) provided a table of suppliers and products, and a chart summarizing technologies, uses, and risks. Whelan and DuVernet's (2015) table summarizes threats to validity from statistical and construct considerations.

Table 1
A Five-Factor Model of Big Data Risk

I. CLARITY

A process whose workings are apparent is less risky than one that is obscure.

a. Measurement proximity: Directly measuring the variables is less risky than dealing with data mediated by other processes and thus subject to interference.
b. Transparency of the analysis: Being obvious with what is being done is less risky than running a black box (unless the process is bogus and needs concealment).
c. Unambiguity of the predictor: It is less risky when measure's meaning is universally recognized, rather than vaguely defined. (Cf. discussion of visual or verbal mannerisms that may reflect cultural attributes more than individual difference characteristics.)
d. Observability of the criterion: Measurable outcome is less risky than inferring what happened. Simply differentiating applicants without evidence that the differentiation has organizational benefits (PreVisor, 2010) is risky.

II. USE

Exploratory studies are less risky than implementations that drive operational decisions. Reduce risk by doing studies in advance of final implementation. Consider firewalling the development, maintenance, and internal workings of the system from operational users to avoid possible misuse by decision makers.

a. Recruitment: Traditionally there has been a separation of recruitment (establishing an applicant pool with 1 or more prospects) and selection (decisions made on applicants regarding employment), unless the recruitment process was tantamount to selection. Low risk is extending an invitation rather than making the selection. Using multiple recruitment sources is less risky than reliance on one which may be tilted toward or away from a particular group. This may be an issue particularly with passive recruitment.
b. Suitability: An applicant might be fully qualified for the job but there is good reason not to employ this applicant.
   A sweep of social media and other public sources for indicators of problematic behavior (e.g., membership in a hate group) likely would be low risk. Applying this only to finalists would further lower risk; the numbers are smaller, reducing the possibility of legally cognizable adverse impact. Exclusions based on stereotypes rather than specific business-critical reasons are risky.
c. Organizational development: Included are various practices that promote communication, teamwork, and efficient organization.
   Processes that promote inclusion without being intrusive are less risky. Analysis of work patterns and interests that lead to invitations to a shared work community may exemplify this and be low risk. Interaction monitoring is less risky for relatively short studies compared to long-term or time-intensive (24/7) monitoring. Explaining the reason for the monitoring and getting employee buy-in diminishes risk. Attitude surveys with little guarantee of privacy or anonymity can be risky unless supported by a compelling business rationale and an accepting culture; as with monitoring, some employee groups may feel singled out for unwanted attention if the purpose of the information gathering is not accepted.

d. Selection: There is a differentiation of personnel with important consequences. Because there are legally protected classes for employment selection, there is always risk. Risk is lessened when the process is supportable by traditional validation concepts and practices, validation information comes from more than one validation strategy, there are no alternatives equally effective with less adverse impact, there is a review mechanism, and cross-validation or other review is built into the process. Practices likely to increase risk include dust bowl empiricism, lack of the job analysis and criterion development that define the job and why the criterion is important, and machine learning with continuous automatic model revision so that the decision rules change for each successive cohort of selections.

III. THEORY

Per Kurt Lewin (social psych and organizational development pioneer), there is nothing so practical as a good theory. Theory organizes isolated facts into a coherent story, highlights where parts of the story are missing, predicts new facts to be established, and helps troubleshoot the predictions when they come up short. Processes built on a reasonably sound framework of theory are less risky. Analyzing anything that's conveniently lying around can be very risky.

a. Narrative. There is less risk if the process can be described with a coherent narrative. This is not only for the benefit of the audience; it makes the designers/users walk through the process, allowing for inconsistent or vague areas to be examined.
b. Vulnerability. A good theory should be specific as to what, given certain conditions, should happen when a process is engaged in; if it doesn't happen, there's a signal that something needs to be checked. There are specifics of what the theory says are vulnerable to disconfirmation; of course, confirmation is likely the preferred outcome. Higher risk comes with the atheoretical situation where, whatever happens, the process is self-validating
c. Nomological network: A process is less risky to the extent that it is embedded in a network of constructs and measurement practices that support it.

IV. QUALITY

As the saying goes: Garbage in, garbage out. Data with known provenance that establishes accuracy and completeness are less risky.

a. Data. Risk is reduced to the extent that there is data validation (cleansing to ensure correctness and usefulness) and data integrity (accuracy and consistency of data over its entire life-cycle).
b. Representativeness: The data represent the population of interest for the specific purpose. This reduces risk, particularly of the kind where algorithms are trained to identify characteristics that are demographically biased.
c. Analyzability: The data can be meaningfully analyzed for the intended purpose; there are the tools and expertise to perform the analyses. Preferably, there is generally accepted professional practice to back this up, not something put together for the immediate purpose.

V. STABILITY

The meaning of the data analyses does not change. Having a means to ensure this makes the process less risky.

a. Temporal stability: To the extent that there is reason (argument and/or data analysis) to believe that the relationship to the criterion will endure as long as necessary for the intended purpose, there is less risk.

b. Statistical stability: The relationship to the criterion is less risky to the extent that it is not built on chance or overfitting the data initially at hand. Cross-validation as an ongoing activity comes in here.

The above is hardly the last word on how risk can be parsed. But if it clarifies what we mean by risk and stimulates discussion on how to control it, then its purpose will have been served. It can also be seen that many risk factors apply to data regardless of size.

But it is not enough to describe risk. As a profession, we need to deal with it.

Next Steps

Define the Professional and Legal Matters to Be Addressed

The boogeyman, as noted above, is machine learning run amok. That is not the totality of Big Data and its analytics. The picture is further obscured by commentators who seem to have little awareness of personnel selection science and practice that originated over a century ago. Big Data is providing some interesting possibilities for selection methods. For now, that contribution is more incremental than revolutionary. It is not yet supplanting established methodology. Morrison and Abraham (2015) noted that the 3Vs are generally not essential for selection work—at least not yet. Identifying applicants with sufficient reading comprehension ability to deal with materials used on the job could be done with a computer-administered reading test. Presumably the employer could data mine proxy indicators of reading comprehension from various sources, but why? If Big Data is more suited to new areas (neuroscience games, micro-behaviors during interviews), it may avoid traditional areas important but burdened by adverse impact (e.g., cognitive ability and race, upper body strength, and sex). If not used to perpetuate patterns of exclusion, applications regarding interpersonal skills, corporate citizenship, and organizational fit may be promising areas with low adverse impact.

Although we can hypothesize on how Big Data can generate fresh concerns regarding adverse impact, there is little available information on how specific applications are confronting adverse impact and job relatedness issues. Dunleavy and Morris (2017) note this lack and recommend monitoring events as they unfold. This suggests that although some issues may be addressed now, responding to the challenges of Big Data is a long-term enterprise.

But there are some issues that can be discussed and acted upon in the short term.

There is anecdotal evidence that "profiling" (PreVisor, 2010) has gained some traction with employers. This practice involves the assessment, usually on multiple factors, of "top performers" identified by the client organization's management (perhaps a very small number of people). The profile of assessment scores is then used as the benchmark for new hires. The supposition is that the profile denotes factors which, if present in the new hires, will result in identifying more top performers. The PreVisor white paper identifies seven problems with this supposition. In essence, selection can be based on superficial factors rather than anything substantive for the organization, producing risk that those selected simply share a superficial similarity with high performers (worse if what's shared is protected class group), and thwarting the opportunity to bring to the organization those without the superficial factors but having substantive capabilities. This is a problem previously associated with empirically keyed biodata.

The federal *Uniform Guidelines on Employment Selection Procedures* (1978, § 14B(5); hereafter UGESP, with associated questions and answers (Q&As)), provides a simple standard for criterion validity: statistical significance, $\alpha = 0.05$. Statistical power increases with sample size, and with big samples it will be possible to get the requisite probability with tiny effect size. Whelan and DuVernet (2015) add concern for violation of statistical assumptions underlying the tests, inflation of statistically significant findings due to repeated testing of the same data and post-hoc hypothesizing (peek at the data first, then state a hypothesis suggested by peeking), and heterogeneity of units thrown together in one big analysis. Add to this the stability of relationships derived from the analysis with no theoretical backing to suggest stability, and no cross-validation to check for overfitting the relationship so that it hold only for the initial data. None of these concerns are new, but they get new salience with the analysis of Big Data.

King and Mrkonich (2016) raise a more fundamental issue, causality versus correlation[4] in adverse impact cases, noting "the affirmative defense of job-relatedness protects Big Data methodologies only to the extent that courts countenance criteria that are not directly job-related but instead correlate with job performance." Their argument seems to rest on a distinction between job-related assessment and assessment "not necessarily job-related but highly correlated with behavior relevant to the job." This may seem a semantic quibble, but a similar issue has come in other legal discussions: the difference between competencies viewed as enabling an applicant's performance now, and less immediate considerations such as tardiness, absenteeism, turnover, and susceptibility to on-the-job injury.

Their argument seems to be directed primarily at web scraping and incorporates concerns for statistical significance of trivial effects and instability of correlations. They raise the possibility of differential validity by demographic group, depending on what data are used. They also mention the less discriminatory alternative problem: "Whether an algorithm's marginally greater predictive ability is sufficient to justify its greater adverse impact, if indeed the law recognizes any trade-off between the two." How big a potential difference in adverse impact demands action as a matter of law? If the application does not self-adjust to maximize validity and minimize adverse impact, how often must the user check whether an adjustment needs to be done? Q&A 49 declares that continually investigating alternatives is not necessary after the initial investigation is done for the validity report, "until such time as a new study is called for." But likely this was not written with self-adjusting algorithms in mind.

Some of their concerns seem well-taken, although not necessarily unique to Big Data; other concerns, maybe not so much. Causality inferred from any observational study, in contrast to a controlled experiment, is tenuous. That has not produced an insurmountable hurdle to litigation for either side. Reliance on UGESP may be misplaced[5]; UGESP does not directly address the causality matter, but Q&A 58 states regarding criterion studies that "measures such as absenteeism, tardiness or turnover may be used without a full job analysis if these behaviors are shown by a review of information about the job to be important in the specific situation." This would seem to blunt in one stroke the causation argument and the assertion (p. 577) that all validation under UGESP requires a job analysis.

The Internet Applicant Rule used by the U.S. Department of Labor's Office of Federal Contract Compliance Programs may need a look. Essentially, the rule allows contractors to forego applicant demographic record keeping for those who do not meet "basic qualifications." But the rule is restrictive in how much consideration can be given to applicants other than a quick screen; these is no elaboration on whether specific Big Data applications would or would not comply.

Educate Vendors, Users, and Enforcement Agencies

There maxims apply here:

- Good practice drives out bad practice.
- Nature abhors a vacuum.
- When self-interest joins with the public interest, great things are possible.

The Guzzo et al. (2015) recommendations started as the product of a SIOP ad hoc committee. The evolving nature of Big Data applications does not allow for a one-shot approach to professional guidance. That guidance can be done without calling out specific service providers, overly constraining professional judgment, or inhibiting innovation. But there are risks to manage, and some practices with known flaws to avoid. The precise mechanism for doing this within SIOP, such as an ad hoc or standing committee, can be worked out as needed. There are reasons for I-O psychology to take ownership, certainly not of all Big Data issues, but those that impinge on employment practices. Although the current federal administration is not into regulation proliferation, various federal agencies have expressed concern for how Big Data applications impact consumers and employees. Protecting these constituencies is their mission; professional inattention invites filling the vacuum in the public interest. Efforts to provide that protection would be enhanced by guidance on professional issues from professional sources. It also is in the interest of the profession that government agencies understand how guidance or action that they take could impinge on professional practice. There also is a need to protect our brand. Handler, Bergman, and Taylor's (2018) abatement of risk included the presence of I-O psychologists in the development of Big Data applications. There is also a marketing aspect. A plaintiff-side employment attorney was describing practices that could fit under the Big Data header and explaining why some were ineffective and potentially discriminatory. When asked why employers would sign on to these applications, he said that the marketing presentations were attractive, and the applications were cheap and quick to implement. If the SIOP constituency seeks to compete with data scientists and other non-I-Os in the employment sphere based on quality and effectiveness rather than that of cheap and quick, education on the issues is critical, for us and for potential clients.

Go Back to School

See Guzzo, Park, Stanton, McAbee and Landis (2018) for the new curriculum. Or, if you, gentle reader, are not already into Big Data and the new analytics, at least avail yourself of materials that can be found on the SIOP website, presenters' blog sites, or general sources. Then use what you learned. Doing good things with Big Data and modern analytics is more fun than the legal stuff!

Notes

[1] Here are simple definitions for terminology associated with analyzing Big Data: "Web-scraping, searching the Web across huge amounts of data and downloading relevant portions of it; data mining, algorithms for finding patterns in massive data, regardless of source; unsupervised learning, methods for reliable grouping or classification, rather than making specific predictions; supervised learning, methods where, given a criterion and predictors, the algorithm "leans" how to predict the criterion from data.

[2] This originated with Guzzo, MacLane, Mondragon, Tison, and Tonowski (2017). Special thanks are due to Gary Behrens for editing the table. Praise the editor, you the reader, if you like the table; blame this writer if you don't.

[3] This is a focal article regarding Big Data practice guidelines in SIOP's *Industrial and Organizational Psychology: Perspectives on Science and Practice*, accompanied by a set of refereed commentaries.

[4] Ross and Merrill (2017) also have a causal concern, but with a specific instance: "big data" application of statistical patterns to individual decisions without considering causal factors, thus committing ecological fallacy.

[5] UGESP has gone 40 years without revision and there are concerns for its relevance apart from Big Data. See McDaniel, Kepes, and Banks's (2011) focal article and associated commentaries.

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TIP-Topics for Students
Project Management Strategies for Grad School and Beyond

Stefanie Gisler, Bradley Gray, Jenna-Lyn Roman, & Ethan Rothstein
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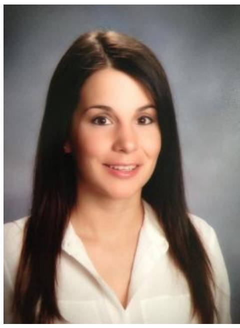

Keywords: project management, goal setting, practical knowledge, practical experience, recovery

In our first year as TIP-Topics columnists, our columns have offered suggestions for successfully gaining entry into I-O graduate programs, navigating I-O grad school as an international student, and grappling with the common work–life balance issues that grad students face. We now turn our attention to the underexplored yet critically important topic of project management during the graduate school years. Given that I-O grad students balance their coursework, research activities, professional endeavors (i.e., teaching assistantships, research assistantships, internships), and service, project management issues can plague students during their time in grad school and, potentially, impact their future on the job market.

To investigate this subject further we spoke to I-O professionals who work in academia as well as several applied practitioners to learn more about the project management strategies they recommend. We spoke to **Stephanie Andel** (postdoctoral scholar, University of South Florida Muma College of Business), **Erin Eatough** (assistant professor, Baruch College, & The Graduate Center, CUNY), **Kimberly French** (assistant professor, Georgia Institute of Technology), **Nicholas Salter** (associate professor, Ramapo College of New Jersey), and **Logan Watts** (assistant professor, Baruch College, & The Graduate Center, CUNY) for their academic perspective about project managment. In addition, we also spoke to **Michael Chetta** (managing partner, Talent Metrics Consulting), Dan Cashman (director of Performance Improvement, University of Maryland Baltimore Washington Medical Center), and **Alan Friedman** (chief executive officer, J3PERSONICA) to gain an applied point of view on this topic. Each contributor offered salient advice about project management specifically geared towards I-O grad students.

We came to the realization that project management strategies are not one size fits all. Each person we spoke with utilized a variety of systems to manage the research projects or applied tasks on their plate. Most acknowledged that it takes students some trial and error to find the specific approach that works for them, however each offered suggestions that all I-O graduate students would find helpful in their current programs, regardless of whether they aspire to seek an academic or applied career in the future. We will share our experts' advice about their project management techniques such as goal setting, compartmentalizing and prioritizing, choosing projects wisely, cultivating applied projects, and mentally recovering to maximize productivity in grad school and beyond.

Use Goal Setting Techniques

Drs. Nicholas Salter, Erin Eatough, and Stephanie Andel discussed the importance of effective goal setting, specifically setting SMART goals (Specific, Measurable, Attainable, Relevant and Timebound) to maximize productivity. They also emphasized the importance of breaking up projects, particularly larger projects (e.g. thesis, dissertation) into smaller, more manageable pieces. Dr. Eatough advised, "Pay attention to the scale of the goal as it relates to the next actionable step." When she has a large goal (e.g., to send a manuscript out for review by a certain date) she sets subgoals and even subgoals to those. Then, those goals are mapped out from week to week and day to day for achieving the overarching goal. Dr. Salter said that he also implements a structured, organized approach to managing projects for his own research and instills that framework for projects his students are working on.

One of the most important aspects of goal setting is establishing deadlines. Dr. Andel acknowledges that although setting deadlines has worked for her, some people struggle with meeting the deadlines that they impose upon themselves. Dr. Logan Watts feels that when managing your research queue it is important to realize which deadlines are real deadlines (i.e., not negotiable) and which are not. It is important to balance the projects you want to do with those projects and tasks you must do. Structured plans were at the core of most of our contributors' project management strategies.

Compartmentalize and Prioritize

Dr. Michael Chetta suggested grad students try compartmentalizing. When he was in grad school, he was balancing a full time job, a full time PhD program, and family responsibilities. Every Saturday and Sunday he left his house to work on his dissertation at a family member's house. By doing that, he could spend the entire day being productive on school work or his dissertation and not be distracted. Dr. Eatough also suggests the strategies of limiting distractions or interruptions like email notifications and text messages as it is important to reduce the cognitive drain of switching tasks and switching roles back and forth all day long. In addition, she batches email at certain times of the day and closes email when she is working on other tasks. This helps her get into deep work or flow states.

Dr. Watts stated that a person can only actually work on one project at a time, which sounds deceptively simple in theory yet difficult to put into practice when students are juggling coursework, research, internships, and professional development. Dr. Andel structures her research productivity in the following way, with one project as her current research priority. Each day she starts by working on her priority project. She prefers limiting active projects to three projects at a time. She starts her work each day by working on her priority project first. After that she alternates the order in which she works on her other two projects giving equal time to each project. Dr. Eatough tries to pick one non-negotiable priority task at night and work on that first thing in the morning, before the day's events can throw her off track.

Choose Projects Wisely

Before taking on new projects, Dr. Eatough recommends that students consider whether a project has the potential to make a meaningful contribution to the literature and is of interest to them. Given that most projects require extensive energy and often last for many months or years, it is important that the work you have done provides theoretical insight or useful practical information and is about something you feel connected to or invested in. Dr. Andel and Dr. Watts said that they typically pass on projects

that are not situated firmly within their research interests. If a potential project is outside of your research interests, they suggest taking time to carefully consider whether you want to work on the project anyway. Dr. Salter stated that students should try to avoid projects that are not a good use of their time. Dr. Eatough suggested graduate students maximize their contributions on as many research projects as possible during their training to broaden their experiences. Rather than turning down projects, students who seek out projects to their maximum capacity are best able to absorb "on the job" training from their mentors, fellow students, and collaborators to supplement formal learning in courses and seminars.

Before Taking on a New Project Consider…

___ Is the project in your area of expertise?
___ Do you have a lull?
___ Is the project interesting to you?

Dr. Kimberly French suggested that before students take on a new project (even if your mentor is the one pitching it to you), think about it for a day or two before saying yes. Another consideration is "whether it is really the right time to take on an additional project," said Dr. Andel. She also emphasized that it is important to think about if the project is in your area, consider if you have a lull in projects, and if the project is interesting to you. In addition, Andel said to beware of when projects are out of your hands with colleagues or reviewers, because you know it will be coming back at some point, and it can be overwhelming when that happens. Given that many projects take longer than anticipated, Dr. Salter advises his students to be really thoughtful about what they agree to. Dr. French states she sometimes struggles with turning down projects, so she has employed a "yes, but later" tactic for opportunities that were great but that she could not work right away. She also advised students to be cautious of projects that they cannot add much to or when their time investment is not worth the potential impact of the research.

Cultivate Applied Projects

Especially important for those who want to go applied, both Alan Friedman and Dan Cashman stressed that students should try to gain as much practical experience as possible in organizations to complement their I-O coursework. Whether through pro bono consulting or other types of volunteer work. Friedman advised: "Don't be so transactional," as sometimes the experience gained from unpaid projects can pay dividends later in one's career. Although not suggesting that students should always opt to intern or work without compensation, Friedman stated that there are circumstances in which it might be beneficial for students to consider taking an unpaid opportunity to gain valuable experience. Similarly, Cashman suggested students not to worry about the title or compensation that a particular job might have as long as they can find opportunities to start I-O relevant projects that can help them land their dream job later.

Dr. Chetta advocated that all I-O graduate students make a concerted professional development effort. He posits that a level of notoriety is achieved by being active and that professional development is a long game. He advised that grad students need to go to local I-O networking events as well as SIOP and

APA conferences, if possible. He said that students looking for an applied or academic career should consider volunteering at their local I-O professional group. Finally, Dr. Chetta advises that there are a lot of intangibles to making money down the road.

Don't Forget About Recovery

Dr. Andel described her "funday" allotments that are an important part of her project timelines. She stated, "It's easy to think we should spend every minute working and to be guilty when we don't, but that approach isn't realistic or helpful." She schedules "fundays" into her project timelines, in which she planfully takes days off from working on research and does not feel bad about using them. In addition, she mentioned the importance of being involved in a hobby or activity during graduate school, preferably one that is unrelated to your program and involves people from outside the I-O community. She notes that the breaks from her research and academic work, as well as having the ability to interact with people not involved in I-O, increased her productivity.

Dr. Eatough aims to improve her recovery from work through meditation, mindfulness, and better sleep hygiene to optimize and energize her work hours. She stressed that "mental focus and energy are our biggest assets," so cultivating environments that facilitate access to our mental resources is crucial.

Mental focus and energy are our biggest assets.

Conclusion

Maintaining effective project management strategies can be a real challenge in graduate school. However, grad school is a great time to set up good work habits for the rest of your career. It is important to pay attention to daily work behaviors, both good and bad, because of the overall well-being implications that fostering good habits while mitigating bad ones has during grad school and beyond. Although we highlighted a variety of strategies grad students can use to maximize productivity, it is best to choose the methods that work with your individual work style. Learning how to get the most out of your working hours may take some experimenting to see what works best for you. However, developing project management skills now will continue to help you in your future career.

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We would like to thank our contributors for their willingness to participate
and the advice they shared with our readers.

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Bradley Gray is a PhD student at Baruch College and The Graduate Center, CUNY. He obtained a BA in Psychology from Wake Forest University in 2010 and an MA in Clinical Psychology from Towson University in 2012. He researches occupational health psychology, with an interest in the relationship between supervisors and their employees, and is also interested in culture change and executive development.

Jenna-Lyn Roman is completing an MS degree at Baruch College, CUNY and will begin her PhD studies at the Georgia Institute of Technology in August 2018. She is interested in work–family research with an emphasis on nontraditional workers and understudied populations (i.e., military families), as well as occupational health psychology and gender parity topics. Jenna would like to be a university professor specializing in work–family topics.

Ethan Rothstein is a PhD student at Baruch College and The Graduate Center, CUNY. Ethan obtained his BA in Clinical Psychology from Tufts University in 2013. His primary area of research has been the interface between work and family, but he has also conducted research on motivation, leadership, team processes, and occupational health psychology. After he graduates, Ethan would like to pursue an applied career in both consulting and industry.

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On Ending an Academic Chapter

Allison S. Gabriel
University of Arizona

I found out I received tenure at the University of Arizona on April 27, 2017. It was a Friday, and my department was spending the afternoon volunteering at the Community Food Bank of Southern Arizona in Tucson. I was standing at a table sorting cucumbers next to one of my PhD advisees talking about projects and how I was probably going to skip on the department happy hour because my parents were visiting for the weekend (a total fortuitous fluke in timing). I was so focused on the fact that my hand had literally just gone through the middle of a rotted cucumber that I didn't see my department chair, **Jerel Slaughter**, coming over with a huge smile on his face. I looked up and I immediately knew. **Nathan Podsakoff** was promoted to full professor at the same time (he'd never announce it himself, so I'll take advantage of my position one last time and announce it for him—I'm so, so proud of you, friend) and the department happy hour quickly became a tenure and promotion celebration for the two of us. My parents came with Mike. They were so proud and so relieved, because they all knew first hand how hard the last 5 years were on me (and them) at times. I was gifted a purple satin Miss-America-type sash from my PhD student that was bedazzled and said "Tenure, b**ches!" It is, almost a month later, still one of the funniest things I have ever seen. It was the perfect way to end this academic chapter. Oh, this crazy chapter—one of turbulence, and unexpected moves, and more self-doubt than I am probably willing to admit to myself. But, this crazy chapter also came with a lot of feelings of triumph, and amazing collaborators turned friends, and finally feeling as though I landed where I was always meant to be.

A few days after the celebrations, I was with a friend from the marketing department. She asked what felt different with the tenure decision. I told her I didn't really know, because I still spent time the weekend it happened completing an R&R that was due. She told me that a friend of hers who had just received tenure described it as this: You're still doing the same thing, but it no longer feels like a ravenous lion is chasing you down the entire time. That's certainly true (maybe that's why running pretenure was always a big stress reliever for me). But, as I thought about her question more over the following days, I realized that the other thing that had changed was that I wasn't questioning my self-worth in the field anymore. And, that's a problem. It's a problem to have your self-worth so wrapped up in a five page single-spaced statement that you don't feel relief until someone else tells you you're enough. I wish that's something I had told myself when I first started and that it didn't take 5 years to get the message. It's certainly something I plan on telling everyone one of my students who I advise moving forward. You are more than a piece of paper, or a citation index, or the number of A-publications you have. In a field where rejection is more the norm than not, we don't need to be putting ourselves down.

It may be the case that I'm the only one that felt this way on the tenure track, and if it is, then let's all be glad that I'm done with that phase of my academic career (I know Mike certainly is). But, in the event I'm not, I'd like my last column here for *TIP*—and one that's rather brief given that I have overshared more than enough!—to say this: You are enough in this field. Make sure that you do good work that makes you feel fulfilled, and I promise that you will find where you are meant to be, and if you have doubts about that, come find me at SIOP. I'll probably be hanging out in the lobby. You'll find me in a purple bedazzled sash.

This marks my final column for *TIP*. It has been a joy—and an interesting form of public self-reflection—to write 14 columns. I've so appreciated every note received, social media mention, and word of encouragement from **Morrie Mullins** and **Tara Behrend** who trusted me enough to give me this platform. I hope that I stayed true to my original goal, which was giving honest insight into what I was thinking and feeling during the tenure process. Now, I am thrilled to be passing the baton to someone who I admire immensely, who has new perspectives we can all learn from, and who I immediately thought of when Tara and I began brainstorming who the column should go to next. **Dorothy Carter** (assistant professor of Industrial/Organizational Psychology [extraordinaire] at the University of Georgia)—you are awesome, you are enough, and I can't wait to be your biggest fan as you take on this column.

As I said at the end of my very first Academics' Forum column in January of 2015: Let the next journey as an academic begin…

Max. Classroom Capacity: An Interview With Donald Truxillo

Loren J. Naidoo
Baruch College and the Graduate Center, CUNY

Welcome back readers! For this issue I'm very excited to be joined by **Donald Truxillo**, the 2017 winner of SIOP's distinguished teaching award! Donald is a professor of I-O psychology at Portland State University, which he joined 24 years ago after a career in industry. His research, which concerns applicant reactions to the selection process, issues associated with older workers, and the antecedents of workplace safety, has been published in top tier journals including *JAP*, *PPsych*, and *JOM*, and has received grant funding from the NSF and NIOSH. Many I-O psychology instructors and students are familiar with his popular textbook, *Psychology and Work: Perspectives on Industrial and Organizational Psychology* with PSU colleague coauthors **Talya Bauer** (2012 SIOP Distinguished Teacher awardee and current SIOP president) and **Berrin Erdogan** (SIOP Fellow). Donald is a dedicated and innovative teacher, having long incorporated applied experiences into his classes and having received two Fullbright teaching fellowships, two fellowships from the Italian Ministry of Education, as well as regularly teaching at the University of Trento, Italy, and serving on their doctoral training committee. He has supervised 17 completed doctoral dissertations since joining PSU.

Loren Naidoo: Thanks so much for agreeing to speak with me Donald! I understand that you started off as a practitioner before making the switch to academia. What made you decide that being a professor was the right move for you?

Donald Truxillo: When I started graduate school at 22, I was sure that I did not want to be an academic. Part of this was that I was sure that I would hate teaching. In fact, it was only towards the end of my time in graduate school that I had to teach a class—and found that I actually enjoyed it. So then I found myself on the fence regarding my career path. I did go the practitioner route, and I enjoyed it a lot and gained invaluable experience. But I continued to teach regularly during this time, and I supervised PhD interns as well. I also found myself very interested in answering research questions that came up in my practice work, such as why job applicants sometimes don't like valid assessments. I was lucky that I had some publications in graduate school so that making the switch to full-time academics was not impossible. Then when I got the opportunity to join the faculty at Portland State, I did.

LN: It's amazing that you were able to make that practice-to-academia career shift. I don't know too many people who have been able to do that. Do you think it's necessary to have applied experience to be an effective instructor of I-O psychology? In what ways (if any) do you think your applied experience has benefited your teaching?

DT: I think one reason that I was able to make the shift is that I did have a couple of publications. In that sense, getting involved with my professors' research gave me a bit of flexibility. As for your question, I don't think that it is absolutely necessary to have that experience, but it certainly helps. The good thing is that most I-O academics have some applied research when they come out, or they get it fairly quickly. In my case, I would say that my work experience helped me a lot with my teaching, in that it can help you to make the material come alive for students, especially for undergraduates who may have very

little work experience. I would also say that applied experience and research/teaching are highly synergistic endeavors, or at least they have been for me. In addition, keeping your ear to the ground about current trends in practice is necessary to teaching and research because research and practice are so intertwined in I-O.

LN: I really like and agree with the idea that research, teaching, and practice can be synergistic rather than competing demands on one's time. Like you I had a chance to teach undergraduate classes as a PhD student, and now I mentor PhD students who are given opportunities to teach undergraduate classes. Similarly, I know many MA/MS/MBA students who have taught a class or two on the way to or shortly after graduation. Balancing multiple demands is a common challenge for grad students, and I think that many of those who intend to pursue careers in practice don't consider the possibility that teaching experience may benefit their applied careers. In what ways do you think that teaching experience can benefit a future I-O practitioner?

DT: In many ways. First, there is no better way to learn something deeply than having to explain it to someone else. Second, once you are done, depending on the courses you teach, it can keep much of the literature fresh in your mind. Third, teaching can give you even greater credibility. Finally, it really is good to broaden your experience in this way; in my case, it got me to realize that I actually do like teaching and shifted my career!

LN: Beyond making the material come alive by talking about applied experiences, what are some other practices or principles that you believe make your own teaching effective?

DT: I would say that the first thing is to think of the topic from the learner's perspective and what you can assume that they know or don't know about it. Thinking of undergraduates, consider that many of them have no work experience or that they may know relatively little about I-O psychology. This is where the examples come in handy, either based on your own experience or based on relevant examples in the news. (This is an approach we have taken our I-O textbook.) To help with this, I also get students with some work experience engaged in the class and to give their examples. In fact, these working students usually have terrific examples—and also terrific questions that can aid in class discussion.

Second, on that note, I try to avoid a pure lecture and often work in questions to the class as I introduce new topics rather than keep the communication going one way. Third, I build some exercises or case studies into the class, since I-O is an applied topic. I've also added community-based learning aspects to my undergraduate classes (e.g., they might do a training needs assessment for a community organization.) For my industrial psychology class I've built in a significant paper worth half the final grade where students must apply the course concepts to an organization where they or a friend/family member has worked.

Fourth, I don't use PowerPoint—I do give students an outline to give them an organizing framework for the material, but they need to take their own notes. I believe that students learn more and internalize the material more effectively from this approach. Finally, I'm a big proponent in procedural justice and try to be fair in my testing. Some questions may be hard, but there are no surprises. In fact, my reputation is that if you come to class and take good notes you will do well in my courses.

LN: Wait, so you don't use PowerPoint in your undergraduate classes at all? That's very intriguing to me. How do you organize a typical undergraduate class? I'm curious about this because my impression

(perhaps mistaken) is that PowerPoint (or similar presentation software) is at once ubiquitous in undergraduate psychology classrooms and also generates a decided lack of enthusiasm from both students and the faculty themselves.

DT: Right, I don't use PowerPoints at all for my undergraduate I-O classes. The original reason was that I don't do well with PPs in lectures—I end up almost reading the slides. The PPs make me a very passive lecturer, and I think it's dreary for the students; it definitely is for me. (BTW, I know this isn't true for everyone—I'm only talking about myself here!) My concern about not using PP, though, is giving the students enough of a framework to follow along and organize their notes. So I give them an outline of the course in advance, also posted online, and I follow it very closely. In any case, by ditching the PPs I find myself much more engaged, and I've been told by students that I get really enthusiastic in my lectures. I also explain to students why I don't use PP and how I structure the class, and they seem fine with it. I think I might take a different approach if I were teaching new material for the first time, but for undergraduate I-O classes, I haven't missed PP at all. The students say that they haven't either. Plus, as I said before, I think that when they take their notes they do internalize the material more.

LN: That sounds fantastic. I have also tried some strategies to encourage good note taking habits but have not gone "all-in" like you! Kudos! Let me change direction a bit. I notice that you have had quite a few interesting international academic appointments. What are some challenges and some benefits of teaching in a different country in your experience? Are you planning to continue seeking out international teaching experiences?

DT: I have been lucky to teach quite a bit overseas at the graduate level, most frequently (annually) at the University of Trento in Italy. I've also taught at the U. of Palermo and U. of Bologna (Italy), and in the Erasmus Mundus program at the U. of Valencia (Spain). In some ways teaching is just the same but of course can be a bit different. For instance, even if the students know English, I have to consciously slow down my speaking a little so students can keep up with me.

As to the benefits, it's been invaluable to see how I-O (or work psychology) is framed in different parts of the world; for example, in many other countries the focus is more on the worker than on the organization. But even more important to me, through this teaching I have been lucky to work with amazing colleagues and research collaborators—and friends—from around the world. Of course, having the opportunity to immerse yourself in a different culture for months at a time has been an incredible opportunity that is personally enriching.

As for future teaching...I actually will be leaving Portland State this fall, moving to the Kemmy Business School at the University of Limerick, Ireland. I will miss my wonderful colleagues and doctoral students in Portland, but I am also excited about this next opportunity.

LN: Congratulations! Donald, it's been such a pleasure talking to you—thanks for sharing your experiences with us!
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Readers, as always, your comments, questions, and feedback are welcome.

SIOP in Washington: Advocating for I-O in Federal Public Policy

Bill Ruch, Lewis-Burke Associates LLC, and
Alexander Alonso, Society for Human Resource Management

Since July 2013, SIOP and Lewis-Burke Associates LLC (Lewis-Burke) have collaborated to make I-O science and research accessible to federal and congressional policy makers. SIOP has embedded a foundational government relations infrastructure within the organization, enabling SIOP to develop an authoritative voice as a stakeholder in science policy in Washington, DC; to navigate the federal political landscape; and to engage with federal and congressional policy makers, promoting SIOP as a vital resource for evidence-based decision making. SIOP in Washington *features government relations activities and news to inform members on SIOP engagement with the federal government and relevant public policy.*

Appropriations Update: SIOP Submits FY 2019 Appropriations Testimony on National Science Foundation Funding and House Appropriations Committee Approves Funding for Key Science Agencies

SIOP Submits FY 2019 Appropriations Testimony on National Science Foundation Funding

On April 17, SIOP submitted written testimony to the House and Senate Appropriations Subcommittees on Commerce, Justice, Science, and Related Agencies (CJS) urging them to appropriate $8.45 billion for the National Science Foundation (NSF) in fiscal year (FY) 2019. The testimony also conveys the importance and applications of social and behavioral science research funded through the Foundation. SIOP's testimony will be incorporated into the Congressional Record to inform funding deliberations in the House and Senate.

NSF collectively funds over 60% of the federal social science research portfolio. These projects are largely overseen by the Foundation's Directorate for Social, Behavioral, and Economic Sciences (SBE), which sponsors several projects that support SIOP researchers and practitioners. Given NSF's role as the primary conduit for federally sponsored social science research, Lewis-Burke Associates LLC (Lewis-Burke), on behalf of SIOP, has pursued a comprehensive outreach strategy intended to meaningfully raise the profile of I-O research at NSF, directly advocate for federal support for social science, and position I-O researchers to capitalize on NSF funding opportunities.

House Appropriations Committee Approves Funding for Key Science Agencies

A few weeks later, on May 17, the House Appropriations Committee approved its fiscal year (FY) 2019 Commerce, Justice, Science, and Related Agencies (CJS) appropriations bill by a party line vote of 32–19. The bill would provide a total of $62.5 billion in discretionary funding for the National Science Foundation (NSF), National Aeronautics and Space Administration (NASA), National Oceanic and Atmospheric Administration (NOAA), National Institute of Standards and Technology (NIST), Economic Development Administration (EDA), and Department of Justice (DOJ), among other programs. The total allocation—$2.9 billion more than the House CJS Appropriations Subcommittee received in FY 2018—would support large increases to NASA, NSF, and DOJ while also accommodating an additional $2 billion for the Census Bureau as the agency ramps up to the 2020 Census.

As part of its consideration of the bill, the House Appropriations Committee released its report containing more details and direction to the agencies on CJS programs. In keeping with the previous year, the

House bill would largely ignore many of the spending cuts proposed in the administration's budget request, including Science, Technology, Engineering, and Mathematics (STEM), minority-serving, and scientific research programs at both NSF and NASA. Of particular interest to SIOP, the House bill would provide the following funding levels:

- NSF would be funded at $8.17 billion, slightly below the requested amount from SIOP and the research community, but $408 million above the FY 2018 omnibus level. The Research and Related Activities (R&RA) account would be funded at $6.6 billion, $317 million above the FY 2018 level. Among other priorities, NSF would be directed to continue to award grants to support STEM education authorized under the *STEM Education Act of 2015*, including those related to developing "innovations in mentoring, training and apprenticeships." The 2015 act authorized NSF's informal education portfolio and defined STEM to explicitly include computer science.
- NASA would receive $21.5 billion, an increase of $810 million or 3.9 percent above the FY 2018 enacted level. Within this amount, the Science Mission Directorate would receive $6.68 billion, an increase of $459 million and 7.4 percent above FY 2018. The bill would also embrace the Administration's proposal to eliminate the Space Technology Mission Directorate and reorient agency-wide technology activities toward solely human spaceflight endeavors.
- DOJ would receive $31.1 billion, an $805 million increase above the FY 2018 enacted level. Within this amount, the bill would provide increased funding for Research, Evaluation, and Statistics (RES) within DOJ's Office of Justice Programs (OJP), and designate specific funding for research on evidence-based opioid intervention strategies, building police–community trust, offender reentry programs, and violence against women.

SIOP is prepared to work with others in the science policy community to continue to advocate for robust funding for research priories as this bill makes its way to the House floor and as the Senate considers complementary legislation.

SIOP Participates in Coalition for National Science Funding Exhibition and Meetings on Capitol Hill

On May 9, SIOP member **Dr. Tara Behrend**, associate professor at the George Washington University's Department of Organizational Sciences and Communication, participated in a series of meetings with key congressional committees on preparing and inspiring the future Science, Technology, Engineering, and Mathematics (STEM) workforce with innovative STEM-focused high schools. Dr. Behrend and Bill Ruch from Lewis-Burke Associates LLC (Lewis-Burke) met with staff from key congressional committees with oversight over STEM issues, including the Senate Committee on Commerce, Science, and Transportation; the House Education and the Workforce Committee; and the House Science, Space and Technology Committee's Research and Technology Subcommittee.

During the meetings, Dr. Behrend explained her work on promoting inclusive STEM education and I-O research findings in key areas such as work at the human–technology frontier, artificial intelligence, and other pressing workforce issues. The staff appreciated learning more about I-O and expressed interest in SIOP's ability to provide future input when the committees consider initiatives to bolster workforce pipelines. Later that day, Dr. Behrend represented the Society at the 24th annual Coalition for National Science Funding (CNSF) Capitol Hill Exhibition.

The Exhibition is an opportunity for CNSF members to display and discuss National Science Foundation (NSF)-funded research directly with members of Congress, federal agency officials, and other policymakers and allows the research community to highlight the importance of continued investment in NSF and

basic research. SIOP's booth at the exhibition featured Dr. Behrend's research on STEM education. The booth was popular with attendees, and Dr. Behrend answered questions and discussed the importance of federal investments in I-O-driven social and behavioral science research.

Visitors to the booth included NSF leadership from several key directorates, including Dr. Tamera Schneider, Deputy Division Director of the Division of Behavioral and Cognitive Sciences, as well as various other federal agency officials. In addition, Dr. Behrend's research topic provoked interest and conversations with members of Congress, including Rep. Leonard Lance (R-NJ-7) and Rep. James Comer (R-KY-1), as well as staff from several congressional offices. As a whole, the experience helped elevate the profile of the Society and I-O research within the scientific community and to key decision makers in Washington.

CNSF is an alliance of over 140 organizations that support the goal of increasing the national investment in NSF research and education programs. SIOP joined CNSF in the fall of 2014 and participated in the past three exhibitions. Through SIOP's government relations activities, like the CNSF Exhibition, the Society is able to highlight the value of I-O research to federal agency program managers and policymakers and promote SIOP as a prominent and credible stakeholder in the science community's government relations priorities.

Social, Behavioral, and Economic Sciences Advisory Committee Meeting Previews Convergence Accelerator Program

On May 10–11, Lewis-Burke Associates LLC (Lewis-Burke) attended the Spring 2018 Advisory Committee for Social, Behavioral and Economic Sciences (SBE) Directorate at the National Science Foundation (NSF). Given the importance of the SBE Directorate for federally funded social and behavioral science, attending this meeting enables Lewis-Burke to monitor developments within the directorate that have relevance for SIOP and maintain relationships with key program officials and administrators.

Of interest to I-O researchers and practitioners was the discussion regarding the development of new NSF Convergence Accelerators, including one on the Future of Work at the Human–Technology Frontier

(FW-HTF). FW-HTF is one of NSF's 10 Big Ideas focused on multidisciplinary research to better understand and advance human–technology partnership in the workplace.

At the meeting, Dr. Fay Lomax Cook, assistant director for SBE, presented on the forthcoming Convergence Accelerators program, which would seek partnerships with other agencies, industry, foundations, and international organizations to support translational research, testbeds, infrastructure access, and workforce considerations in areas of national importance. The Convergence Accelerators would support application-driven and use-inspired basic research and would support research teams to take ideas from concept to deliverables. Convergent and diverse teams of six to ten people would be integrated into cohorts that NSF would "proactively and intentionally" manage. Through this new activity, NSF would provide seed investment, competition, education, and mentorship.

NSF plans to initiate Convergence Accelerators in a limited number of tracks or focus areas, with each providing specific outcomes and deliverables. Example FW-HTF tracks presented at the NSB meeting included:

- "Smart manufacturing environments: adaptive collaboration between humans and machines using Artificial Intelligence (AI)
- Cybersecurity at scale: identifying and mitigating vulnerabilities using AI"
- During the discussions with the Advisory Committee, there was also interest in pursuing an Accelerator on the science of team science.

NSF is still developing the process for how Convergence Accelerators would operate, but laid out an initial plan:

- Ideas for new Convergence Accelerators tracks would come from NSF-supported researchers and research results; either organically or from focused workshops.
- Short proposals to develop new teams would be reviewed by NSF who would then select around 20 teams (in three to five specific tracks) to participate in an intense six-month team formation process. NSF would provide small awards for the workshops and teams.
- The team formation process would likely include a 1-week retreat. The process would allow cohorts of teams to work together with support from NSF and external mentors.
- Following the team formation phase, teams would then be invited to pitch ideas to NSF to win awards of approximately $1-2 million per year. At the end of the project, NSF could present a prize for the best outcome.

In addition to discussions of the Convergence Accelerator program, NSF program officers for the FW-HTF said that they were considering future solicitations on the risks and remedies associated with the technology-enabled workforce, which could include research on how emerging technologies are building new fields and ways to develop proper skillsets. I-O researchers should prepare for forthcoming opportunities for research on the impact of automation on the economy and the future workforce. Lewis-Burke will continue to provide information on this and other developments relevant to SIOP.

For more information about SIOP Advocacy efforts or to learn how you can get involved in government relations activities, please contact us directly at Alexander.Alonso@shrm.org or Bill@lewis-burke.com.

Recognizing Distinguished Contributions Award Winners

Liberty J. Munson and Garett Howardson

As part of our ongoing series to recognize the achievements of SIOP's award winners, this edition focuses on several of our Distinguished Contributions Award winners: **Eden King,** one of the winners of our Distinguished Service Contributions Award; **Scott Tannenbaum,** Distinguished Professional Contributions Award; and **Dov Eden,** Distinguished Scientific Contributions.

I have often wondered what it takes to earn one of these distinguished awards.

Distinguished Service Contributions: Meet Eden King
Distinguished Professional Contributions: Meet Scott Tannenbaum
Distinguished Scientific Contributions: Meet Dov Eden

Distinguished Service Contributions: Meet Eden King

Share a little a bit about who you are and what you do.
My name is Eden King and I'm an associate professor of I-O Psychology at Rice University. I study the challenges that women, LGBT people, religious and racio-ethnic minorities, mothers and pregnant women, and older workers face in the workplace. I also identify, develop, and assess theory-grounded interventions to overcome these obstacles and provide evidence to make work better for everyone.

Describe the work that you did that resulted in this award.
I'm proud to have served SIOP in a number of roles. I was a member of the External Relations, Scientific Affairs, and E&T Committees. I was chair of the LGBT committee. I served as SIOP Program chair and SIOP Conference chair before serving on the Executive Board as the officer for the Conferences & Programs portfolio. I have truly enjoyed my engagement in our society and I'm honored to serve as the president elect this year.

How did you get started?
I served as a student volunteer on the (then ad-hoc) LGBT committee; my advisor was the committee chair and invited me to join.

Why did you want to do this?
It is and was important to me that LGBT people feel valued in SIOP.

If someone wanted to get more involved, what would you recommend? How does someone get on the "path" to getting into one of these leadership roles?
Find a committee that is doing something that you care about! Indicating your interest on the SIOP volunteer system and then follow up with the committee chair to let them know you'd like to help. If you bring enthusiasm and dedication, more opportunities will undoubtedly follow.

What's a fun fact about yourself (something that people may not know)?
I lived at a summer camp for 3 years!

What piece of advice would you give to someone new to I-O psychology?
SIOP is an organization composed of enthusiastic and dedicated members who together create knowledge, relationships and networks, and professional development opportunities where they would not otherwise exist. **Get involved and you won't regret it!**

Distinguished Professional Contributions: Meet Scott Tannenbaum

Share a little a bit about who you are and what you do.
I cofounded and lead a boutique consulting and research firm called the Group for Organizational Effectiveness. That's a long name, so everyone calls us gOE. We celebrated our 30th anniversary last year. During that time, I've had the chance to provide support, research, tools, and advice to hundreds of companies, domestically and globally, including many *Fortune* 500 companies. I've also worked extensively with the US Air Force, Army, and Navy, and with agencies such as NASA. I've been fortunate to work with a great group of people on some very interesting challenges.

We capped our firm size many years ago so we could spend most of our time consulting, conducting research, and writing rather than on administration and management. My work is broad in nature, but I spend a good bit of time on challenges related to team effectiveness, learning, and change management.

I started my career simultaneously in both academia and practice. At the beginning of my career, I served as a professor in the business school at SUNY-Albany in parallel with my early work at gOE. I enjoyed both aspects of my professional life but eventually gave up tenure. That raised an eyebrow or two!

You've been on both the academic and applied sides of our field, and you won this award for Professional Contributions throughout your career. How do you view the science–practice gap?
I've always been interested in both sides and feel like my sweet spot is where they intersect. When I'm wearing my consultant hat, I often base my advice on what I know about the science. I think that's a competitive advantage of being an I-O psychologist: We can bring theory and research to bear on problems; we just have to do so in a way that is practical and understandable. Sometimes, it is about being a good translator of research or incorporating evidence-based findings into practical tools. The Award Committee noted the gOEbase toolkit for HR and OD consultants as one of my accomplishments. That's an example of trying to disseminate what we know in a useful, practical manner that reflects a true blend of practice and science.

I continued to conduct research after leaving academia, in part because I enjoy it and in part because I think it makes me sharper in my applied work. I've published as much after I gave up tenure as I did as a professor. Much of my research focuses on specific applied challenges, such as team research to help NASA prepare for future space missions, research on accelerating on-the-job learning for the Army, or research on what drives leadership success for a large financial services company. I don't personally experience a gap between science and practice, and I think our field needs people across the continuum—scientists, practitioners, and bridgers who keep a foot in each. I'm probably a bridger.

What's a fun fact about yourself (something that people may not know)?
I'm originally from the Bronx, not far from Yankee Stadium, but I'm a Red Sox fan. Perhaps that tells you all you need to know about me. I have many friends and family members who shake their head when I show up wearing a Red Sox hat.

What piece of advice would you give to someone new to I-O psychology? (If you knew then what you know now…)
The best advice I can give is to build your network and surround yourself with people you respect, who you can learn from, and who you enjoy being around. I'm a better I-O psychologist (and a happier person!) because of the people I work and hang out with. When I'm faced with a challenge I usually can find someone in my network to provide ideas, partner on a project, or simply be a sounding board.

I'm still friends with and do work with many of the people with whom I went to grad school, including **John Mathieu, Eduardo Salas,** and **Becky Beard**. I've become friends with people who I originally met as clients. My colleagues at gOE have been awesome; most of what I've accomplished is only feasible because of them. So, my advice is to **start building your network early in your career and surround yourself with people you like and can grow with**.

Distinguished Scientific Contributions: Meet Dov Eden

Share a little a bit about who you are and what you do.
I'm an I-O psychologist with a PhD in organizational psychology from the University of Michigan, conferred in 1970. I immediately immigrated to Israel, secured a post at Tel Aviv University's business school, and conducted here all my research since my dissertation. I retired 10 years ago but continue doing organizational field experiments and attending conferences.

Describe the research/work that you did that resulted in this award. What led to your idea?
As a student I realized that the field experiment is the king of methods. This is due to its justifying supreme causal inference and external validity. This meshes with my intolerance for ambiguity, but there had been precious few field experiments on I-O topics. Even those few were, in actuality, quasi-experiments. No one had conducted a true field experiment in an organization. It was common knowledge that they are "too hard to do." After all, randomization seems inimical to organization! That deterred even the most talented researchers in the field. To me, this was a challenge worth confronting. If successful, I would be doing work that is highly valued, and I would be doing something unique. Not just tweaking one more variable involved in a thoroughly researched topic like goal setting, organizational justice, or job satisfaction, thereby adding marginally to an already large knowledge base. I sought to do something that I thought was fascinating and that would create a "Wow!" reaction among I-O colleagues. I wanted to put my personal stamp on something.

The experimental method was not the only driver. The topic itself—the Pygmalion effect—was both fascinating and inherently experimental. While still a student, I learned about Robert Rosenthal's work on the experimenter effect. Then, I read Rosenthal and Jacobson's 1968 Pygmalion in the classroom. I was enthralled. If simply getting teachers to expect more of their pupils makes pupils learn more, would getting managers to expect more make their subordinates more productive? Because the independent variable is raising leader expectations, an experimental treatment is indispensable. If you merely measure leader expectations and follower performance and correlate them, you have not tested the Pygmalion effect. By definition, the Pygmalion effect involves raising leader expectations; nonexperimental methods cannot do that.

What do you learn that was surprised you? Did you have an "aha" moment? What was it?

My “aha” moment came when I realized that I can conduct randomized field experiments in organizations. I suppose in common with many psychologist colleagues, I have a methods fetish. Field experimentation is a method I could cathect. I felt much better about my experimental results than I had about the results of the correlational research on job stress and strain that I had been doing. Encouraged by my first successful field experiment, I did another and then another. I realized that they were not impossible to do and that I could do them. I have since thought of my reaction to these early successes as enhanced “experimenter self-efficacy,” a construct I conceptualized.

What do you see as the lasting/unique contribution of this work to our discipline? How can it be used to drive changes in organizations, the employee experience, etc.?
Experiment! Lately we are seeing more field experiments. It’s not a flood, but it’s a significant increase. Inasmuch as I-O involves finding ways to make organizations more effective, it is imperative that the researchers among us put effective tools into the hands of our practical colleagues. Correlational knowledge may be interesting, but its causal ambiguity renders it unreliable as a guide to action. A practitioner can't say to a client, “Change X and it will affect Y; although it’s possible that it won't because perhaps Y influences X.” Only experimental findings can inform sound practice. Advising managers to change something based on correlational results borders on malpractice.

Who would you say was the biggest advocate of your research/work that resulted in the award? How did that person become aware of your work?
My great friend and colleague, **Allen Kraut,** an exceptionally active and reputable member of SIOP, had known of my work for over 4 decades before he submitted my candidacy for the award.

To what extent would you say this work/research was interdisciplinary?
My work leveraging the experimental methods is fundamental psychology through and through. Further, the Pygmalion notion originated in general, social, and educational psychology. It was by reading in these “cousin” psychology subspecialties that I stumbled upon the Pygmalion phenomenon. Another example is work I did on “implicit leadership theory,” which Uri Leviatan and I originally dubbed “implicit organization theory.” It was inspired by learning about research on “implicit personality theory” conducted by personality researchers. Thus, reading research in other areas of psychology has been the source of the ideas behind some of my research. Knowing this, I seek related knowledge by reading and attending sessions at meetings that deal with issues that are only remotely related to the I-O topics that I master.

Are you still doing work/research in the same area where you won the award? If so, what are you currently working on in this space? If not, what are you working on now and how did you move into this different work/research area?
The Pygmalion research lead me to theorize about self-efficacy and to study it experimentally. This led me to extend the self-efficacy construct to means efficacy (i.e., one’s belief in the usefulness of the tools available to perform a job). I continue studying the effects of means efficacy on performance. My collaborators and I are testing whether experimentally enhancing trainees’ beliefs in the practical usefulness of business courses and sundry training programs leads them to perform better.

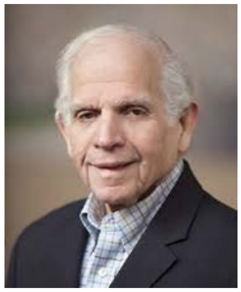
What’s a fun fact about yourself (something that people may not know)?
I enjoy listening to music, travel, and watching my eight grandchildren grow: the oldest completing her service in the Israel Navy and the youngest completing kindergarten.

What piece of advice would you give to someone new to I/O psychology? (If you knew then what you know now…)
Experiment! Define for yourself some area of research that fascinates you and that no one has thought of before or borrow one from a different specialty or from a different discipline, and study it experimentally in organizational context. Don't be afraid to be different.

I-O researchers are always on the lookout for samples. If you're a working graduate student, find a professor who is interested in research that your organization might be willing to support (and that interests you in terms of a dissertation). If you're a professor, get acquainted with your working students; they can help you gain access to organizations. I benefited tremendously from employed Master's students who had to fulfill a thesis requirement. The converging interests of students in need of thesis research and my need for organizational samples proved exceedingly fruitful for them and for me, and for our science.

Study the *APA Publication Manual.* Use it compulsively. Try to develop a writing style that is smooth, brief, to-the-point, and draws in the reader. **Dare to entertain your reader with something bold and spiffy from time to time. Don't be boring**.

International Practice Forum Special Series
Industrial-Organizational Psychology Helps Heal the World (Part 4):
Bringing Advantages to Disadvantaged Women



Lynda Zugec
The Workforce Consultants

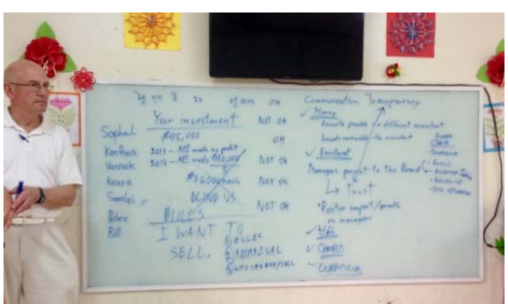
Walter Reichman
Org Vitality

In this issue, we continue on our exciting development for the International Practice Forum! With Walter Reichman (Org Vitality) and a number of I-O psychology practitioners and academics, we explore the ways in which "Industrial-Organizational Psychology Helps Heal the World." Through a series of articles, we present real and actionable ways in which I-O academics and practitioners have an impact in innovative and creative ways and how they have been helping to heal the world. Here, we connect with Peter Scontrino on the I-O work he and his colleagues have doing in Thailand, Cambodia, and Myanmar!

Bringing Advantages to Disadvantaged Women

M. Peter Scontrino

About 7 years ago, I reconnected with a friend of mine, Bill Taylor, who was a retired management consultant. Bill and I had worked together over the years but had slowly drifted apart. When I last worked with Bill, I discovered that Bill and I did similar work, which included coaching, leadership development, and business planning even though we took different academic and business paths to get there. I am an industrial-organizational psychologist whereas Bill is a certified management consultant (CMC). Over lunch, Bill shared an experience with me about a recent trip to Bali, Indonesia where he had visited some social services organizations that were in desperate need of leaders with effective skills. I was fascinated by Bill's story and volunteered to work with him in Bali.



Leadership Session

Bill and I spent the next couple of years working with these leaders and seeing dramatic improvements in the way their organizations were managed. Our work included coaching a university president and his senior staff, developing business plans, conducting team building sessions, performing organizational audits, and creating competencies and standards of performance. The leaders we coached were very supportive of our work. Unfortunately, the senior leaders to whom they reported were not very supportive. We knew all too well that the good work we had done would quickly fade away. After the promised leadership and financial support failed to materialize, we decided to seek other organizations within Southeast Asia that may recognize and value the contributions our initiatives would have on their organizations.

Our focus was specifically on developing opportunities to serve disadvantaged women and girls. As we moved along in our efforts, we came to the realization that we needed a substantial amount of financial support to address many of the needs we were identifying. To that end, we took matters into our own hands and decided to create a 501(c)3 nonprofit organization and entitled it the Southeast Asia Fund (www.seafund.org). Incredibly, the fund has been an undeniable success; we have continuously raised $250,000.00 to $300,000.00 per year to support our continued growth. 100% of the funds we raise directly finance the work we do. Bill and I cover all the related administrative costs.

We have been on a number of journeys. We left Bali for Thailand to work with Catholic nuns, the Good Shepherd Sisters, whose mission is to provide tools and resources for disadvantaged women and children. They have organized programs located throughout Thailand and Myanmar. Our initial work began in Bangkok, where the sisters operate a large Training Center/Home. We assisted them in the development of business plans and performance goals and also used our team building facilitations skills to help teams in the training center become more cohesive.

Bill and I decided discussed the frequency of our trips to Southeast Asia with Bill deciding to go four times a year. I decided I would join in the efforts twice a year. Although we continually work with Buddhist Monks, Catholic Nuns, and other religions, our work is agnostic.

New Dormitory

One of our other trips was to Pattaya, which is 89 miles south of Bangkok. Pattaya is a beautiful seaside town known for its extensive "red light district." The sisters had established the Fountain of Life Women's Centre and Children's Centre to provide education and skills training for socially disadvantaged women and children with a particular focus on those exploited by the tourism industry, prostitution, and trafficking. After engaging in discussions with them, the sisters in Pattaya asked us to do three things: (a) conduct a leadership development workshop, (b) help them create a strategic plan, and (c) help them develop an annual business plan. Bill and I designed a transformation leadership workshop with a special emphasis on effective communication skills, problem solving, and employee engagement. All of these topics fit nicely into the culture the sisters had created and wanted to further develop.

We swiftly realized that leadership within an order of nuns has some unique characteristics. First, you live with your coworkers. Second, you live with your coworkers for life. Third, you are the leader for 5 years and then a follower for many, many years thereafter. Finally, you are leading a resource poor organization that is always seeking funds to support their projects.

Thirty nuns and one priest participated in our leadership development workshop. All of the sessions were highly practical, with table discussions focused on things that the organization would actually use and implement. At the end of the week, the sisters had developed a vision statement, a mission statement, and a values statement. These were used to shape the strategic plan and business plan over the coming months.

One year later, we were invited by the Good Shepherd Sisters in Yangon, Myanmar to offer an identical workshop for the sisters living within the region. This workshop had the intended consequences and same outcomes as the Pattaya workshop.

We knew we were onto something when, while in Myanmar, Buddhist monks who worked in Hpa-An (about 100 miles east of Yangon) heard about our leadership development work. They asked us to slightly modify the leadership workshop for 35 young adults who had leadership roles in social service organizations. This was a very intriguing request as Myanmar was in the early stages of offering increased freedoms to its citizens. One of the most frequently questions asked during the workshop was, "How do you do this in a democracy?"

This was the first time we taught a leadership development workshop in a Buddhist Temple.

Happy Monks

In 2017, I started was preparing a leadership development workshop for the Good Shepherd Sisters at Wildflower Home in Chiang Mai, Thailand. Bill was not available to alongside me so I decided to send a note to a few industrial-organizational psychologists. I was amazed. Almost overnight, I had a dozen volunteers. I continue to engage the I-O psychologists that have offered to help us with the work we are doing.

Last year, I-O psychologist **Paul Green** accompanied us to Chiang Mai in Thailand to help us create a competency model for social sector leaders. His insights, enthusiasm, and support for our work encouraged us to focus even more on leadership development.

In 2018, Bill and I will travel to Siem Reap in Cambodia to conduct a workshop on building self-sustaining organizations. We will be teaching the leaders from 20 organizations how to help their social-sector organizations become more self-sufficient.

In the meantime, Bill and I continue to be thankful for the breadth and depth of the work we have been able to in Thailand, Cambodia, and Myanmar. We have had the opportunity to:

- Build a village school (many times)
- Coach leaders to develop performance improvement plans
- Build a girls' dormitory
- Facilitate an antitrafficking workshop
- Build a profit-making restaurant for a girl's school
- Buy a diesel-powered rice harvester for a monk
- Develop a chicken ranch
- Build a fish farm

New Furniture

All of the aforementioned projects provided funds and/or other resources to support the health and education of girls within these countries.

If you are interested in working with us in Southeast Asia, are able to provide funding or suggest ideas for funding, please let us know! Bill and I would very much welcome your support! For more information, visit www.seafund.org.

Do you know of someone who is using I-O psychology to heal the world?

WE NEED YOU AND YOUR INPUT! We are calling upon you, the global I-O community, to reach out and submit your experiences for future columns. Give us your insights from lessons learned as you help heal the world.

To provide any feedback or suggestions on the International Practice Forum, please send an email to the following address: lynda.zugec@theworkforceconsultants.com

Why Is Living Wage Not the Minimum Wage?

Kelly L. Reburn, Fiona E. Moyer, Randy J. Knebel, and Mark C. Bowler
East Carolina University

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Introduction

Whereas organizations are legally obligated to provide their employees with a minimum wage, recent literature has introduced the concept of a living wage (e.g., see Werner & Lim, 2016). Rather than being a threshold that employees are entitled to by law, living wage refers to the minimum income necessary for an employee to be able to meet the minimum standards of subsisting in their specific community or region (Glasmeier & MIT, 2018). Thus, it is a relative, market-based value that combines the wages of workers with costs of basic needs in a specific geographical region (Glasmeier & MIT, 2018; Werner & Lim, 2016). Although much of the research on living wage falls outside of the realm of I-O psychology, it is time that the concept be considered. It is well understood that the design of compensation systems and distribution of pay contribute to employees' motivation to work (Jurgensen, 1978; Pinder, 2008). These, however, are often influenced by legal requirements that fail to consider the region or community-specific cost of living and typical expenses. Thus, the lowest paid employees may struggle or fail to obtain the income necessary to fulfill their basic needs. The inability to meet basic needs can contribute to a lower quality of life and poorer well-being that, in turn, can influence the performance of low-wage workers. Research in this area, however, is limited. This article seeks to expand on living wage research and inspire professionals and academics in the fields of I-O psychology and occupational health psychology (OHP) to explore the question of, "Why is living wage not the minimum wage?" More importantly, we hope to inspire research into the motivational impact associated with living wage.

The current article examines the U.S. state-level deficit between minimum wage and living wage using the MIT Living Wage Tool by Dr. Amy Glasmeier and MIT (2018) and public access data regarding mean and median hourly wages (United States Bureau of Labor Statistics, 2016). We take this comparison a step further by compiling additional public data on state-level physical and mental health (Centers for Disease Control and Prevention, 2016). Such comparisons seek to illustrate the importance in addressing the deficit and recognizing its impact on employee well-being.

Living Wage

The federal minimum wage, presently effective since 2009, is $7.25 per hour (United States Department of Labor, n.d.). This amount represents the threshold an employer is legally required to pay employees. Initially established by the Fair Labor Standards Act (FLSA, 1938), the federal minimum wage has been raised 22 times (Perez, 2015). Currently, it has been almost 10 years since the last increase (United States Department of Labor, n.d.). Adjusting for inflation, the minimum wage was highest in 1968 at a value that corresponds to $11.08 in 2016 dollars (Wenger, 2016). This inflation adjusted figure represents that which is nearly $4.00 more than the current minimum wage of $7.25. Additionally, the purchasing power of minimum wage varies by location, which is why several states have increased their minimum wages above the federal minimum wage (United States Department of Labor, 2018b).

In contrast to the legally prescribed federal minimum wage, living wage incorporates a variety of geographically determined expenditures such as housing, transportation, childcare, food, and healthcare. According to Dr. Amy Glasmeier and colleagues at the Massachusetts Institute of Technology (2018), it represents the minimum employment earnings required to cover a family's fundamental needs based on geographically specific information and family composition (e.g., taxes). It should be noted that, for any given region, there are numerous living wage values representing the minimal amount of income necessary given different familial arrangements (e.g., living alone; two working adults; one working adult with one child).

Occupational Health

Investing in employee health and well-being is an ongoing process that creates reciprocal benefits for both individuals and organizations (Grawitch, Gottschalk, & Munz, 2006). Previous research suggests that there are significant costs associated with a lack of investment in employee health (Cooper, 1994). Thus, it is beneficial for organizations to invest in employee health and well-being. One way in which organizations can begin to do so is by examining fairness of hourly wages.

Occupational health psychology is an applied discipline that incorporates aspects of I-O psychology with several domains outside of psychology, including public health, human resources, medicine, and safety (Adkins, 1999). The overall goal is to decrease stress and psychosocial risk factors in both work and life domains to increase employee well-being and organizational effectiveness while controlling healthcare costs and decreasing absenteeism and accidents (e.g., Donatelle & Hawkins, 1989). A source of work and life stress for many individuals is not having adequate wages to meet life demands (e.g., raising a child, living in a city). For example, approximately 62% of Americans rate money as a significant source of stress in their lives (APA, 2017). Given that wages are such an important resource for success, the framework of OHP can be applied to examine the differences between minimum wage, actual wages, and living wage as a source of work and life stress. This, in turn, can help in the development of prevention strategies to combat long term negative health consequences for employees. Individuals that earn a living wage are more likely to be able to afford health-related necessities compared to those that earn the minimum wage.

Methods

Our initial efforts to examine the potential state-level deficit between minimum wage and living wage were focused on compiling publicly accessible data made available by the United States Department of Labor. Specifically, minimum wage data were collected from the Wage and Hour Division Consolidated Minimum Wage Table (2018a) and the National Conference of State Legislatures (2017). Data regarding hourly means and medians were sourced from Occupational Employment Statistics (USBLS, 2016). The data related to health and well-being that were used in our analyses were published by the Centers for Disease Control and Prevention (2016). Using the Living Wage Tool provided by Dr. Amy Glasmeier and MIT (2018), an hourly living wage for one adult was collected for each state in the U.S. and Washington D.C. All of the data employed in our analyses can be found using the links provided in the references section of this article. To better visualize the potential differences in our variables of interest, the authors utilized the data visualization platform, Tableau Desktop, Professional Edition (10.5.2). Additional analyses were completed in Microsoft Excel and SPSS.

Results

Table 1 provides information regarding the living wage, minimum wage, mean hourly wage, and median hourly wage for each state. Additionally, Table 1 provides information regarding the difference between

the living wage and minimum wage for each state. The top five states with the highest discrepancy between living wage and minimum wage were Georgia, Virginia, Hawaii, Maryland, and the District of Columbia. For each of these states, the difference was equal to or greater than $5.61. Interestingly, the District of Columbia also has the overall highest living wage of $17.11. Those with the smallest discrepancy between living wage and minimum wage were Arizona, Washington, South Dakota, Nebraska, and Arkansas. For each of these states, the difference was equal to or less than $1.88 with the living wage for these states ranging from $10.03 to $12.28. Table 2 shows significant correlations between wage data and health outcomes. The difference between median wage and living wage is negatively correlated to both average physically and mentally unhealthy days. The median wage for each state is higher than the living wage. This indicates that the higher median wage is in comparison to living wage, both mentally and physically unhealthy days decrease.

Table 1
Living Wage and Minimum Wage Across the United States

State	Living wage	Minimum wage	Difference	Hourly mean	Hourly median
Alabama*	11.14	7.25	3.89	20.44	15.43
Alaska	12.48	9.80	2.68	27.26	22.68
Arizona	11.22	10.00	1.22	22.26	17.05
Arkansas*	10.38	8.50	1.88	19.03	14.48
California*	14.01	10.00	4.01	27.33	19.67
Colorado	12.47	9.30	3.17	25.34	19.09
Connecticut	12.88	10.10	2.78	27.87	21.68
Delaware	12.44	8.25	4.19	24.48	18.25
District of Columbia	17.11	11.50	5.61	39.88	32.63
Florida	11.75	8.10	3.65	21.18	15.77
Georgia*	11.93	5.15	6.78	22.38	16.51
Hawaii	15.39	9.25	6.14	23.76	19.24
Idaho	10.64	7.25	3.39	20.15	15.77
Illinois*	12.50	8.25	4.25	24.76	18.40
Indiana*	10.70	7.25	3.45	20.64	16.25
Iowa	10.53	7.25	3.28	20.93	16.72
Kansas	10.69	7.25	3.44	21.13	16.57
Kentucky	10.49	7.25	3.24	20.08	15.96
Louisiana*	10.91	7.25	3.66	19.84	15.43
Maine	11.60	9.00	2.60	21.24	17.01
Maryland	14.62	8.75	5.87	26.98	20.68
Massachusetts	13.39	11.00	2.39	29.25	22.45
Michigan*	10.87	8.90	1.97	22.76	17.32
Minnesota*	11.53	9.50	2.03	24.68	19.28
Mississippi	10.86	7.25	3.61	18.41	14.22
Missouri	10.76	7.7	3.06	21.45	16.46
Montana*	10.95	8.15	2.80	19.92	15.75
Nebraska*	10.60	9.00	1.60	21.24	16.77
Nevada*	10.94	7.25	3.69	21.17	16.59
New Hampshire	12.01	7.25	4.76	24.13	18.40
New Jersey	13.72	8.44	5.28	26.94	20.17
New Mexico	10.98	7.50	3.48	21.23	15.82

New York	14.42	9.70	4.72	28.32	20.56
North Carolina	11.36	7.25	4.11	21.77	16.31
North Dakota	10.89	7.25	3.64	22.66	18.83
Ohio*	10.47	8.15	2.32	22.08	17.19
Oklahoma*	10.52	7.25	3.27	20.56	15.93
Oregon	12.48	9.75	2.73	23.90	18.26
Pennsylvania	11.11	7.25	3.86	22.85	17.63
Rhode Island	12.10	9.60	2.50	24.96	19.10
South Carolina*	11.17	7.25	3.92	19.97	15.45
South Dakota	10.03	8.65	1.38	19.27	15.19
Tennessee*	10.44	7.25	3.19	20.36	15.77
Texas	11.03	7.25	3.78	22.97	17.06
Utah	11.22	7.25	3.97	21.87	16.83
Vermont*	12.32	10.00	2.32	22.90	18.23
Virginia*	13.86	7.25	6.61	25.53	18.78
Washington	12.28	11.00	1.28	26.83	20.87
West Virginia*	10.68	8.75	1.93	19.35	14.79
Wisconsin	11.03	7.25	3.78	21.75	17.43
Wyoming	10.63	5.15	5.48	22.52	18.61

Reported minimum wage rates are from 2017. *Indicates that additional factors are involved in the determination of the states' required minimum wage (e.g., size of organization).
Source: Minimum wage data was adapted from the U.S. Department of Labor, Wage and Hour Division Consolidated Minimum Wage Table (2018a) and U.S. Department of Labor, National Conference of State Legislatures (2017). Living wage data was obtained through MIT's Living Wage Calculator (Glasmeier & MIT, 2018). Hourly means and medians were obtained through the U.S. Department of Labor, Occupational Employment Statistics (2016).

Table 2
Correlations Between the Difference in Median Wage and Living Wage and Health Outcomes

	Mean	1	2	3
1. Difference	6.09	-		
2. Physically unhealthy days	3.90	-.493**	-	
3. Mentally unhealthy days	3.79	-.298*	.876**	-

Note. *p < .05; **p < .001

Figure 1 illustrates differences between states in the discrepancy between living wage and minimum wage. Each state is color coded based on its discrepancy between living wage for one adult and the state mandated minimum wage. Darker shades indicate a greater difference between living wage and minimum wage. Most states that have a higher living wage also have a higher state mandated minimum wage in comparison to the federal minimum wage. When comparing living wage and minimum wage to the median wage for each state, the median hourly income for each state is higher than the reported living wage (see Table 1).

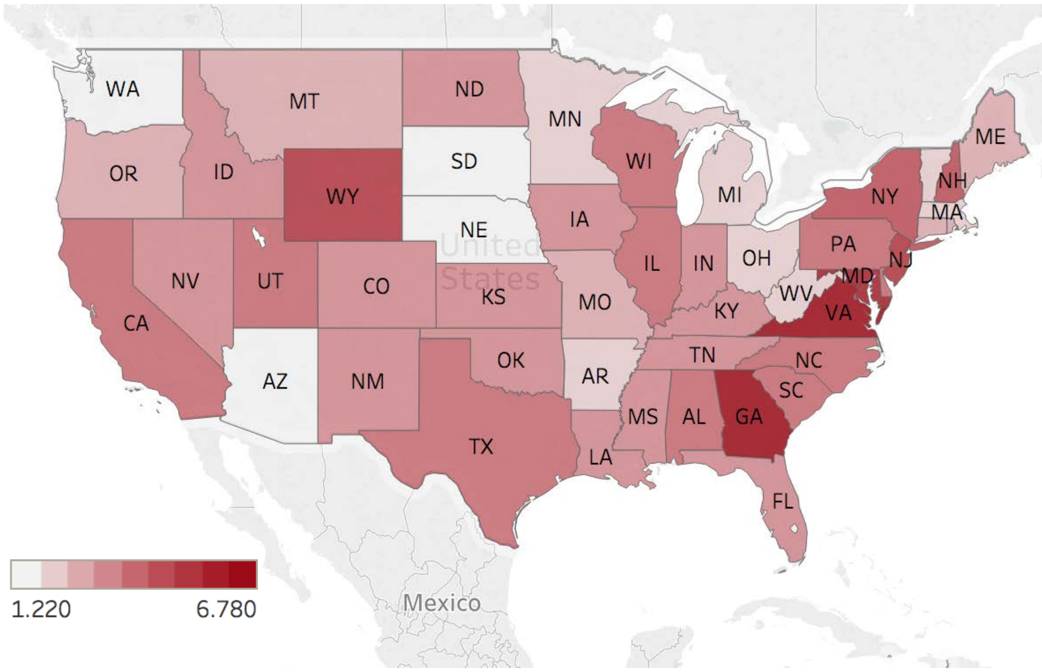

Figure 1. *Difference between living wage and minimum wage by state*

Figure 2 shows the difference between median wage and living wage by state with darker colors indicating a greater difference. The difference was computed by subtracting living wage from median hourly wage. A greater difference (i.e., darker shade) indicates median wage is higher than living wage. All state median hourly wages were above the reported state level living wage.

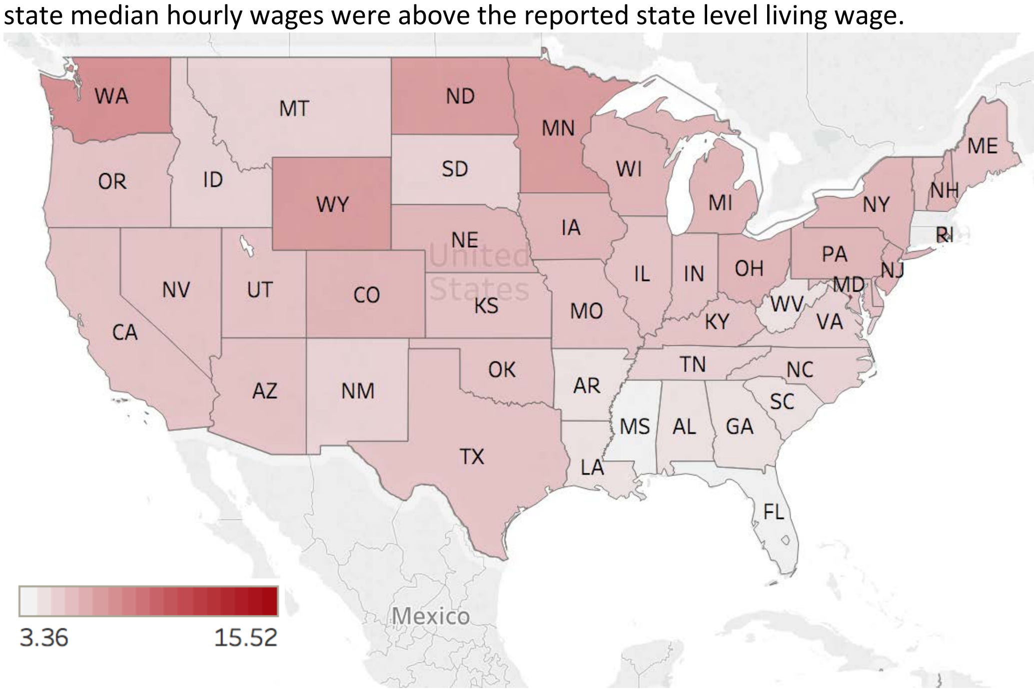

Figure 2. *Difference in median wage and living wage by state*

In comparison, Figure 3 and Figure 4 show the mean number of physically unhealthy and mentally unhealthy days reported by individuals 18 and older. Darker shades indicate more unhealthy days, on average. As indicated by the pattern of shades on each figure, as median wage declines, both average physically and mentally unhealthy days appear to increase. Additionally, as the difference between median wage and living wage increases, both average physically and mentally unhealthy days appear to decrease.

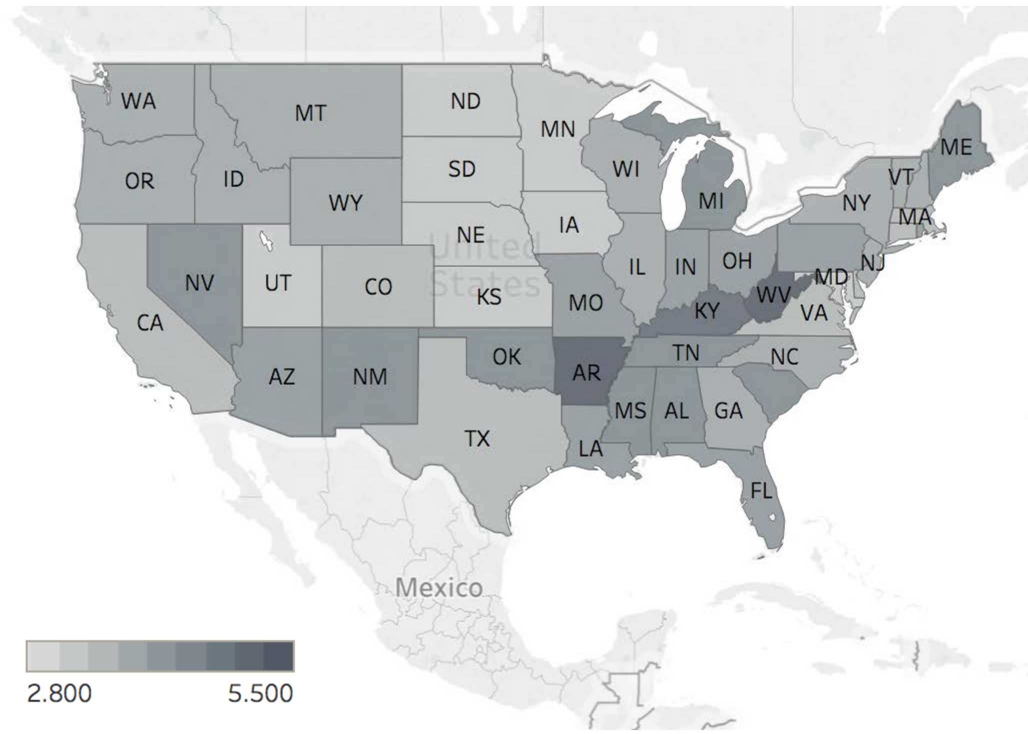

Figure 3. *Average physically unhealthy days by state*

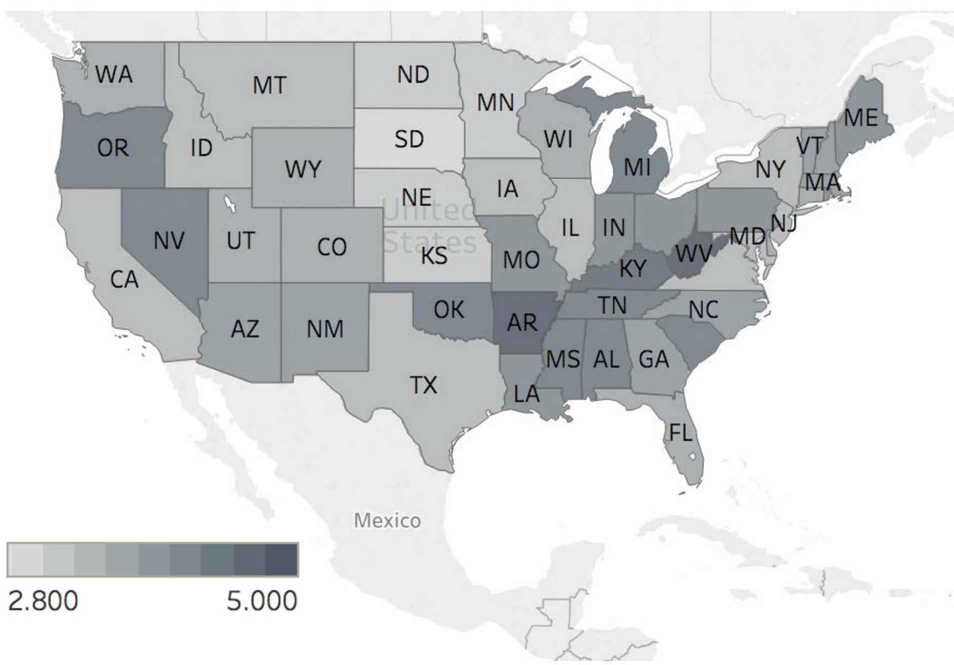

Figure 4. *Average physically unhealthy days by state*

Conclusion

As illustrated by the data, deficits exist between states' minimum wage and the market-based living wage. Considering the potential cumulative impact of such deficits over time, living wage research should be an area of interest in the fields of I-O psychology and OHP. The preliminary analyses that we conducted sought to inspire such an interest by presenting the various wages and making a comparison with both physical and mental health variables. Furthermore, our correlation analyses indicate a relationship between earning a living wage and both physical and mental health. With regard to future research, several areas should be explored. Specifically, future research should seek to understand the effects of such deficits in terms of performance, engagement, and well-being. This can be done through a mixed-method approach using both quantitative and qualitative data. For example, how does earning a living wage affect an employee's level of engagement or organizational commitment? In addition, researchers should seek insights regarding how management can influence stakeholders to buy into the provision of a living wage, and how the context within which such wages are delivered has an impact. Additionally, we based our analyses on the living wage for a single adult. However, only 45.2% of Americans are single adults (United States Census Bureau, 2017). Future research can examine similar comparisons with different types of family units. For example, a single mother of two children earning a minimum wage income would have to work 140 hours a week to earn a living wage for her family (Nadeau & Glasmeier, 2016). In addition, 50% of individuals in each state make below the median hourly wage. Accordingly, it is important to also look at the individual occupations earning below a living wage.

There is also an opportunity to contribute to policy development and legislation through an increased awareness regarding the potential negative effects of insufficient wages. Specifically, the federal minimum wage law should be reexamined in relation to individual health given the potential negative effects that are likely to manifest at the societal level if individuals are not earning a sufficient wage to meet their basic needs. As research suggests, healthy workplace practices can lead to financial benefits for the organization as well as physical, mental, and emotional health benefits for the employees (Grawitch et al., 2006). Thus, the fields of I-O psychology and OHP should seek to contribute to the advocacy for the fair treatment of individuals. We can use our expertise to help organizations establish healthy workplace practices. Doing so will help to create positive outcomes for individuals, organizations, and society.

With regard to limitations, we utilized cross-sectional aggregated data obtained through several different sources. Given the limitations due to the nature of our data, future research should examine relationships between individual wages and health outcomes over time. Although wages should not be manipulated, it is likely that wages will change over time based on a variety of factors (e.g., new job, relocation). Health outcomes can be monitored alongside wage changes to better understand the relationship between wages and health outcomes. Additionally, ecological correlations should be interpreted with caution given that different effects may exist at the individual level (Robinson, 1950). Furthermore, we used difference scores to examine the relationship between median wages and living wages by state. Polynomial regression may be a better method for examining congruence between two variables predicting a third variable (Edwards & Parry, 1993). Future research should examine individual level relationships between wages and health outcomes using polynomial regression. Finally, while we attempted to match the data based on the year in which the information was collected, some of the data differ by a year.

In conclusion, the concept of living wage has received little attention in the fields of I-O psychology and OHP. Through its potential contribution to health and well-being, living wage may have an impact on employees' motivation and performance at work. Thus, the current article sought to expand the awareness on the topic of living wage by comparing data from several difference sources. Although the current article focuses on aggregated data, future research should address the topic through the lens of

psychology and illuminate the potential impact that earning a living wage can have on the workforce by examining relationships between wages and health outcomes at the individual level.

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The High Society

Nathan T. Carter
University of Georgia[1]

I cannot believe I am saying this, but I will be taking over **Paul Muchinsky's** much-loved (and probably much-hated) role as the I-O RoastMaster General. Those who remember Paul's column will remember that it offered a humorous—and often biting—take on issues in the field. Oddly enough, in 2006 I wrote to him while I was a graduate student in the master's program at Western Kentucky University[2] to tell him that I really enjoyed his articles and told him why I enjoyed a particular one. In his gracious response, he said to me[3]: "I caution you to be discrete in sharing such opinions openly as a graduate student. In the course of writing my articles I have 'offended' many leading figures of the establishment, who would welcome my departure from *TIP*. At this stage of my career I can afford such professional rebuke. You cannot. After you graduate I would be most willing to pass the torch to you if you care to take up the cause. I guarantee you will not be voted 'most popular' in SIOP if you choose to do so" (P. Muchinsky, personal communication, February 8, 2006).

So, it is with a great deal of hesitation that I submit to you my first attempt at being funny about I-O psychology. In reading, try not to take me—or yourself—too seriously. After all, we are only tiny specks on this tiny planet doing things that will not be remembered when our sphere erupts into a ball of fire. Also, do remain aware that often I am writing about things where I am just as much the butt of the joke as you.

I have missed Paul's "High Society" column greatly and am a bit afraid to screw it up. But, here goes nothing. As was Paul's tradition, fan mail or hate mail can be sent to pmmuchin@uncg.edu (jk, jk… send to carternt@yahoo.com[3]).

Is Your Data "Big" Enough?

This year's SIOP conference in Chicago, and the previous few years, have been replete with hashtags (known previously as "pound signs") and memes touting the coming of "big data." However, it leaves some of us with an insecurity complex, asking shyly: Is *my* data "big" enough? Here is a nice little checklist for you to use to decide whether you measure up! Warning: Double-, triple-, and quadruple-barreled items ahead!

1. Does writing out your *N* require at least one comma, or preferably more? _____

2. Have you sufficiently confused your colleagues on why your study should have been done in the first place? _____

3. Can safely say you are explaining 85% of your variance without ever bringing up terms like "overfitting" or "saturated?" _____

4. Does your model use at least 20 variables? _____

5. Do you get to say fancy words like “machine” or “genetic” or “AI” when describing your model? _____

6. Do you get to say things that sound like a horror movie about a nightmarish logging camp, like “random forests” or “regression trees?” ____

7. Do you get to use a model with a fancy diagram and pretend it’s *not* just basically stepwise regression? ____

8. Did you spy on people, or otherwise collect data without their knowledge and/or consent? _____

9. Can you answer questions about your project with an air of superiority because the questioner “doesn’t understand math?” ____

10. Is your idea of a fun Saturday night getting lost in an R Stack Exchange? ____

11. Did you get a little upset that I said “<u>IS</u> your data big enough” instead of “<u>ARE</u> your data big enough?” ____

12. Have you not laughed once at this list? ____

If you checked at least two of these, then rest assured, your data ARE probably big enough! Now you can go forth to laugh at those with only puny datasets, a simple set of predictors, and a AUC or R^2 that is .001 less than yours—especially those qualitative researchers! #amirite?! You are a true “data scientist,” whatever that means.

If you did NOT check enough boxes, don’t worry! You can talk about big data without knowing about it! Just log on to Twitter! #bigdata #dataanalytics

Notes

[1]The opinions expressed in this column are that of Nathan Carter, and not his colleagues – whom refer to him as “OpinioNate” (K. Shockley, personal communication, circa 2017) – nor his graduate students, whom are much better people than he.
[2] This would be the FIRST Bowling Green Massacre I would endure. The second would take place in pursuing my PhD at Bowling Green State University (Bowling Green, Ohio). This article is dedicated to the victims of those fictional—er, alternate-factual—tragedies.
[3] Found in the depths of my surprisingly still-active Yahoo! e-mail account, which now is home to a variety of enticing offers from several loan agencies and your thoughts about my “High Society” articles.

7 Questions and Answers About AI and I-O

Calista Tavallali, Sarah Reswow, and Jerod White
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Artificial intelligence (AI) is everywhere, from factories to self-driving cars to robotic vacuums. But what is artificial intelligence, really, and how does it influence work? Few I-O psychologists have formal training in computer science, yet most of them are aware of AI's growing presence in the workplace. Today's organizations are continuously adopting advanced technologies, raising questions about the intersection of AI and I-O. If you've ever struggled to understand the difference between a GitHub and a hubcap, or if deep learning puts you in a deep confusion, read on for a jargon-free introduction to AI and its influence on the nature of work.

What Is AI?

AI is not super-intelligent robots teaming up to take over the world (at least we hope not). Rather, the term "artificial intelligence" encompasses a vast range of technologies that enable computers to solve specific problems in ways that at least superficially resemble human thinking. Behind each advanced AI technology are algorithms, or sets of step-by-step rules that determine a machine's actions in any given situation. Using algorithms, computers process large amounts of data and recognize patterns within the data in order to complete complex tasks (SAS, 2017). Machine learning, deep learning, and neural networks all describe techniques used by scientists to give computers advanced reasoning skills. Importantly, no current AI techniques provide machines with a complete human-equivalent consciousness. Within organizational contexts, this means that today's AI technologies typically perform only the tasks they are designed to complete.

What Is the Progression of AI?

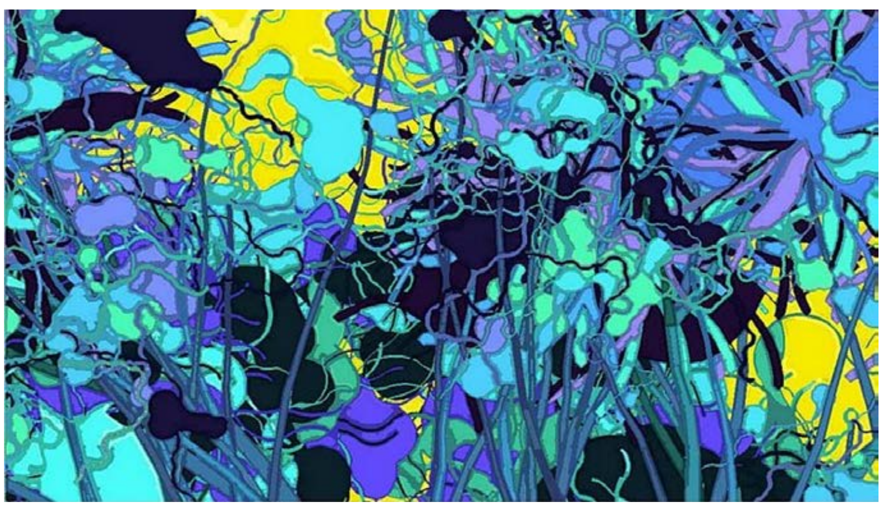
One may suspect that AI is a new research area, but scientists have been developing artificially intelligent machines since the 1950s. During AI's earliest stages, researchers equipped computers to solve simple mathematical problems (SAS, 2017). Several of the breakthroughs in AI we see today result from research building off of early frameworks discovered in the 1970s (e.g., neural networks; Parloff, 2016). For example, many current organizations take advantage of recent advancements in computing power to store large amounts of employee or customer data. Initial research on neural networks recognized that computers solve problems best when they are trained with immense amounts of data, and today's researchers have access to such data. Building upon the key algorithmic discoveries of the 20th century, current organizations generate large databases to continuously improve their neural networks and solve real world problems.

AI has more recently progressed to include technologies that mimic—and in some cases, exceed—actual human reasoning abilities. Consider the human decision-making process, which represents a critical task within most organizational functions. Today's intelligent decision support systems (IDSS) use existing performance data to generate large scale planning suggestions in much the same way that managers do (Yam, Tse, Li, & Tu, 2001). More recently developed AI technologies have outperformed highly skilled humans in a variety of tasks, from comprehending written information (Molina, 2018), to playing games of chess (Ensmenger, 2011), to selecting highly qualified job applicants (Liang & Wang, 1994).

Given such impressive AI accomplishments, it is surprising to note that many of today's fundamental AI techniques are qualitatively similar to those used decades ago. Jen-Hsun Huang, CEO of the leading graphics processing company, Nvidia, refers to today's AI as "software writing software" (Cohn, 2010), an advancement made possible by early AI research on neural networks. A 2017 McKinsey Global Institute (MGI) report argues that AI technologies throughout the past decade have progressed faster than those of the 50 years prior. Using innovative machine learning techniques, today's AI technologies no longer need scripts to complete tasks—they can discover and innovate on their own (Manyika, 2017). Still, these AI discoveries are far from fully replicating the intricacies of human intelligence. In essence, any existing form of artificial intelligence technology is just that: artificial.

How Is AI Applied to Different Kinds of Work?

AI is often thought to influence only industrial and administrative fields, but it affects virtually every industry in the workforce, including the creative and medical sectors. Creative workers use AI to assist them in completing a variety of tasks, whether it be generating food recipes, drafting sports articles, or selecting songs for specific audiences (Newton-Rex, 2017). Even more, AI is capable of independently producing paintings, music, logos, movie trailers, and full film scripts. In the 1970s, Harold Cohen created AARON, an art-producing machine operating off of one of his algorithms. Cohen taught AARON the fundamentals of painting, such as distinguishing objects and elements, to create its own work. Although AARON had never been presented with actual images of objects and elements, it was able to create similar items in its paintings on its own (Moss, 2015).



Painting by AARON, 2004

In recent years, IBM has been a trailblazer in creativity, using its Watson technology to propel AI into new fields such as video marketing. By drawing from hundreds of horror film trailers, Watson technology was able to create its own trailer for the movie, *Morgan* (Smith, 2016). However, the question still remains: Can AI be truly creative on its own? Although it is difficult for us to determine if machines are creatively inspired the same way that we are, AI still shows great promise in constructing original products.

Within the medical field, AI is a powerful resource that professionals can use to effectively assess and treat patients. Consider IBM's Watson for Oncology, an AI bot that analyzes structured and unstructured clinical notes to provide doctors with treatment pathway recommendations for cancer patients (High,

2012). Bots such as these do not enforce treatment decisions, but they do serve as a critical information source for doctors to consider in high-stakes treatment cases. In addition to generating information, AI technologies also show potential in completing certain medical tasks from start to finish. One recent patent, for example, suggests that robots can successfully perform several of the psychomotor duties of pharmacists, such as retrieving and filling pill containers (Ningombam, Singh, & Chanu, 2018).

Will AI Bring the End of Work?

In a word, no. Even so, this is perhaps the most debated question regarding AI and I-O. Some forecasts for a future tech-centered workforce are dire, such as Frey and Osborne's (2013) estimation that 47% of total U.S. employment is at risk of automation. Other researchers anticipate a more optimistic future of AI at work; economists Brynjolfsson and Mitchell used O*NET data to show that of the 30 or so tasks that comprise most jobs, only a few are easily automatable given current technology (2017). Understanding these discrepancies is a critical research endeavor in both the AI and I-O areas currently.

Today's prominent futurists disagree on whether AI will bring the end of work, but they largely agree that is a complicated and powerful form of technology. Ray Kurzweil, director of engineering at Google, believes that AI will change the world of work just like our prior technologies have: Though some jobs will inevitably be outdated as a result of AI, many new ones will be created in the process (Kurzweil, 2014). Even SpaceX CEO, Elon Musk, who fears that AI could eventually take control of us, recognizes that "smart" technologies contribute to society in positive ways when they are carefully designed (Browne, 2018). Other futurists such as Tim O'Reilly argue that the decisions of AI programmers—not AI itself—will determine how work will change in the future. For example, programmers who create AIs that emphasize worker efficiency over satisfaction will influence work differently than programmers who balance the two variables (O'Reilly, 2017). With so many conflicting accounts from today's futurists, I-Os should remember one reason why we work in the first place: to solve problems. If work means solving problems, we won't run out of work until we run out of problems.

What Is the Future of AI?

Thus far, we've introduced a variety of AI forms that learn to complete highly complex, specialized tasks. Some researchers speculate that a single AI technology may one day demonstrate *all* intellectual processes exhibited by humans. Known as general AI, this form of technology would ultimately provide a machine with a consciousness that mirrors those found within humans. The possibility of a superhuman AI is widely debated across disciplines. Futurist Kevin Kelly doubts that creating a general AI is possible. Recognizing human intelligence as a multifaceted trait, Kelly argues that our current forms of AI are not actually smarter than us, but instead just different than us (2017). There are certainly qualitative differences between human and artificial intelligences today, but future researchers could blur the lines between the two.

Another future direction for AI concerns the issue of biases in decision making. Even without a consciousness to fuel misleading gut-based decisions, AI is far from perfect. Researchers must recognize that their human biases influence the effectiveness of the AI technologies they create (Knight, 2017). Indeed, some have even coined the phrase "racist robots" to describe AIs that fall victim to biased forms of reasoning (Buranyi, 2017). One famous example is the Microsoft chatbot named Tay that created anti-Semitic messages it learned from analyzing data on Twitter (Buranyi, 2017). This is not surprising, as AI learns from human data. As long as racism and bias exists in society, AI will learn from it and unintentionally reproduce similar prejudices. Future AIs must operate from powerful algorithms capable of overcoming such prejudices in order to reason in a truly rational fashion.

What Are I-Os Doing With AI?

AI was a popular topic at the 2018 SIOP Annual Conference, with a number of presentations dedicated to discussing the developments of "smart" technologies in various I-O psychology subfields. One symposium focused on AI in psychometrics, demonstrating that the technology can be used to improve the psychological fidelity and practical utility of assessments (Barney et al., 2018). Another presentation took an interdisciplinary approach of AI, combining the experiences of consultants, a data scientist, and a lawyer to provide insights on the influence of AI in personnel selection (Hense, et al., 2018). Yet another presentation focused on the use of algorithms for identifying collaborators and building effective teams (Twyman, Newman, DeChurch, & Contractor, 2018). Today's I-O psychologists clearly recognize that AI has implications for almost every organizational function. Indeed, AI ranked fourth on SIOP's Top 10 Workplace Trends list for this year, a sign that current I-Os are actively engaged in AI research (2018).

What Should I-Os Do Next?

While exploring the crossroads of AI and I-O, future I-O psychologists have two primary responsibilities: to learn and to educate. The rise of AI in decision-making will undoubtedly support a "partnership between humans and machines," as HealthTap CEO Ron Gutman recently stated at a panel discussion at the World Economic Forum. Moving forward, I-O psychologists must continue to learn about AI, focusing on this partnership and its limitations: How can I-O deal with bias from robots, and how can they study jobs that have not yet been created? Questions such as these should guide future I-Os as they study AI.

I-Os will find many opportunities to continue learning about AI given its growing organizational uses. Even in the widely cited scenario of workers losing their jobs due to automation, AI can influence several organizational functions in positive ways. AI can just as easily be used to restart the talent management cycle with recruitment, selection, and training efforts for new occupations. Within selection, for example, AI can use decision tree models to code applicant data by splitting information into nodes until a final decision is made (Chui, Kamalnath, & McCarthy, 2018). Similarly, I-O psychologists will soon design training programs for jobs that do not yet exist, and AI will undoubtedly affect how those programs operate. While AI may bring certain jobs to an end, it will simultaneously provide I-Os with a number of valuable learning opportunities.

In **Kelly Stewart's** SIOP podcast, **Neil Morelli** recently spoke to the same points while also introducing I-Os' duty to educate. Although Morelli believes that there are many advantages to AI technology, he cautions I-O psychologists to understand when AI should and should not be used. If employees are spending excessive amounts of time completing menial, repeatable tasks, AI is an excellent means to improve efficiency (2017). However, adopting AI may not be a wise decision in cases where human judgment is required. For example, consider Uber's decision to develop experimental autonomous cars. In March of 2018, one of these cars struck and killed a bicyclist after identifying the person as an "unknown object" (Madrigal, 2018). Stories such as these not only urge researchers to develop more reliable AI technologies, but they also encourage practicing I-Os to think carefully before adopting them. By continuing to learn about AI, I-Os increase their awareness of potential risks and provide organizational stakeholders with fully informed recommendations. Given that AI continues its trend toward ubiquity, I-Os' learning and educating duties will remain critical for the future of work. As Satya Nadella, CEO of Microsoft, recently noted: "It's our responsibility to have AI augment human ingenuity and human opportunity" (McKendrick, 2017).

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I-O Visibility Committee: Year in Review and Coming Attractions

Stephanie Klein, PhD
Nikki Blacksmith, PhD

The time has come to transition the Visibility Committee Chair role. As part of this transition, the chairs (Stephanie Klein, departing, and Nikki Blacksmith, incoming) would like to share some of Visibility's accomplishments with you. This past year has been amazing, and the coming year should be even better.

In this article we showcase just a subset of our committee members' incredible efforts, preview coming attractions, and provide insight into the 6 (soon to be 7) Visibility subcommittees, where the real work takes place. As you read, please consider whether how Visibility's efforts may align with your own passions, and consider volunteering. Once you complete the SIOP volunteer signup form, you may also wish to contact Nikki to share specific interests or relevant skills.

Before we continue, we want to share our appreciation of our partners in SIOP's Administrative Office. Everyone there is wonderful, whether we work with them regularly or just bug them periodically. Support, insights, guidance, assistance, knowledge—whatever we need, the AO team provides. Thank you!!

And now, Stephanie's **Visibility Committee Highlight Reel**

Branding Subcommittee:

- Completing preparations for a webcast regarding how I-O psychologists solve organizational challenges
- Designed a brief survey of similar organizations to learn best practices in marketing SIOP

HR/Business Subcommittee:

- Six Hot Topics White Papers completed
- Creating short video for business leaders from Big Data White Paper
- Recruited authors of "Lost in Translation" *TIP* series into Visibility; supported publication of remaining installments plus a SIOP Select session during annual conference
- Facilitated Top Minds, Bottom Lines, a preconference event for business leaders and senior HR professionals

Media Subcommittee:

- Surveyed SIOP membership in order to publish Top Ten Workplace Trends
- Refined process for working with AO to publicize Visibility and other committees' initiatives, especially via social media
- Began exploring how Visibility and the AO might develop and sustain relationships with media representatives (e.g., *Washington Post, NY Times* Business editor)

Metrics Subcommittee:

- Completed SIOP Brand Awareness Survey, 5-year follow-up to the 2013 survey
- Catalogued recurring Visibility events that need metrics tracked, as preliminary stage of tracking across SIOP committees
- Identified objectives for use of medial intelligence platform Meltwater

Advocacy/Prosocial Subcommittee:

- Spotlighted prosocial efforts of SIOP members
- Kicked off military veteran bridge-building activities, with goals for 2019 SIOP Conference and Humanitarian Award

Students/Academia Subcommittee:

- Collaborated with APA on a series of blog posts, targeting undergraduate students and educators, about the field of I-O.
- Launched the SIOP Conversation Series, hosting conversations with leading names in I-O
- Initiated efforts to collect metrics on who is viewing/listening to blog posts, webinars, podcasts, and materials created by our subcommittee in order to improve attendance, traffic to the materials, and advertising for future initiatives

Visibility Committee as a whole:

- Set up dashboard to track use of #SIOP18 and drafted plan for additional tracking
- Provided support for I-O Shaken and Stirred event that took place during the annual conference

Closing note from Stephanie: Chairing the Visibility Committee and supporting the subcommittee chairs and members in their work has truly been a privilege. Their ability to find—or create—opportunities to make I-O more visible is awesome.

A lot was accomplished this past year—and there is more to come! Here are **Nikki's Visibility Committee Coming Attractions.**

Thank you, Stephanie! Wow, you have really set the bar for excellence!

Before I jump into the Visibility's vision and goals for this year, I'd like to provide a review SIOP's four strategic goals:

1. Become the premier and trusted authority on work-related human behavior
2. Increase the awareness and use of I-O psychology
3. Meet the needs of those engaged in the science and practice of I-O psychology throughout their careers
4. Model and reinforce the effective integration of science and practice

In order for SIOP to reach these goals, it must become a well-known organization. Thus, in efforts to help SIOP accomplish these goals, the Visibility Committee was designed with the *purpose* of increasing the visibility of SIOP, SIOP members, and I-O psychology as a whole to business leaders and decision makers, HR professionals, public policy officials, and the general public.

Our *vision* is that SIOP will soon become a trusted, household brand name and that I-O psychology becomes recognized as vital tool and practice in all organizations. In order to realize this vision, the committee will be working hard this year. Below I have outlined some of the key goals from each subcommittee.

Branding

The branding subcommittee led by Cochairs Chester Hanvey and Alyssa Gradus, will spend the year reinforcing the branding guidelines and outwardly pushing the visual SIOP brand. This will include designing materials such as infographics, videos, and more that will be used to enhance the initiative of other subcommittees. Their goal is to ensure that when individuals see the icon below they will recognize it immediately as I-O psychology and associate it with SIOP.

HR/Business

Allison Ellis, chair of the HR/business subcommittee, and her team will be dedicating their efforts to educate HR and business executives about I-O psychology and the value it can bring to their organizations. The subcommittee will continue working on white papers and will shortly reveal a new video they are creating!

NEW! Events

The new events subcommittee, chaired by Victoria Mattingly, is a spinoff of the HR/business subcommittee in an effort to provide a more concerted effort to create a bigger and better version of the Top Minds Bottom Lines (TMBL) events. TMBL is designed to educate HR and business executives—who do not have a background in I-O—about the value in applying I-O psychology to their work. We will be marketing the event to top leaders in the DC area so if you know of an executive that is in a place to make decisions and can benefit from this event, please let us know!

Media

As chair of the media subcommittee, Amanda Woller will work with her team to enhance the visibility of SIOP and I-O through all traditional and nontraditional media channels. This year the subcommittee will be developing processes and systems to build and maintain relationships with key reporters, journalists, and writers. They will also be increasing their efforts to expand the Smarter Workplace Awareness Month.

Metrics

Brendan Neuman, chair of the metrics committee, will lead his team in designing and implementing a system of metrics to assess efficacy of SIOP initiatives and the extent to which SIOP is gaining visibility. This includes tracking website traffic, mentions in the news and social media, along with the number of impressions and influence of our messages. This will help us understand what types of communication are most effective!

Advocacy/Prosocial

With Marisa Bossen as chair, the prosocial committee will be focusing on enhancing the visibility of SIOP members' use of I-O knowledge and skills for prosocial work and research. This year her team will focus will be on veteran bridge-building between military and civilian sectors. They will also collaborate with other advocacy and public policy committees, as well as APA 19, to create synergy, and with the awards committee to nominate candidates for the Humanitarian Award.

Students/Academia

The students/academia subcommittee will be working to increase the visibility amongst students and academics. The subcommittee will collaborate with other SIOP committees to make efforts to ensure I-O psychology is covered in introduction to psychology textbooks. They will continue working with APA to publish their blog.

The Visibility Committee had an amazing year and has achieved numerous accomplishments under Stephanie's outstanding leadership. On behalf of the visibility committee (which has over 40 members!), I'd like to thank Stephanie for her guidance and support. Also, a few of the subcommittee chairs and SIOP's executive director have shared personal messages to express his/her gratitude.

> *Throughout my last few years serving on the Visibility Committee, I have had the pleasure of getting to know and work with Stephanie. She was a great resource and advocate as I worked though accomplishing my committee responsibilities, as well as an excellent liaison between the Viz Committee and the SIOP AO. She is passionate about promoting I-O psychology and SIOP to those within and outside of our field, and she relentlessly worked toward advancing this goal as Committee Chair. Although I am excited to work with Nikki, as Stephanie has well equipped and empowered her successor to do a great job taking over, Stephanie will surely be missed. I have no doubt she is going to continue doing great things in SIOP moving forward. – Victoria Mattingly*
>
> *Stephanie, you have been a great leader and mentor to the visibility committee members. Thank you for encouraging me to execute crazy ideas, even when it means a thousand pens. – Amanda Woller*
>
> *Stephanie, thank you so much for all of your leadership, enthusiasm for our committee's work, and support for trying out new and creative initiatives! I have absolutely loved working with you these past few years. You've truly helped to make I-O more visible to students, business leaders, and society more broadly. We are so lucky to have you! – Tori Crain*
>
> *Stephanie understood and operated with the big picture in mind. She was very strategic and an excellent leader to a large and diverse committee. – Jeff Hughes*
>
> *Stefanie, you are an exemplary leader! Working with you has been a pleasure and I hope we can find ways to work together in the future. Thank you so much! – Nikki Blacksmith*

We hope that we can continue the momentum Stephanie created; we have set ambitious goals to build upon the initiatives of the past years' and are ready to work hard. Please consider being a part of our efforts.

Below are some ways we could use your help.

- Let us know when you have been mentioned in the media
- Help us promote the Top Minds Bottom Lines events to executive leaders
- Send us ideas about how to increase visibility
- Share your prosocial work with us
- Tell us about I-O visibility-related events that we can help publicize

Contact the Visibility committee at visibility@siop.org to share accomplishments or send ideas!

I-O Psychology in New York City: Looking Back and Ahead

Harold Takooshian, Melissa W. Search, Virginia E. Schein, Walter Reichman, and Allen I. Kraut

Since Peter Minuit "bought" the island of Manhattan on May 24, 1626, Manhattan has emerged as a unique world center, both for commerce and for psychological science. Yet we find little published information today on the remarkable history of industrial-organizational psychology in Manhattan (Woroschinski & Takooshian, 2017).

Since 1939, the Metropolitan New York Association of Applied Psychologists (METRO) has thrived in New York City (Shapiro, Erickson, & Farmer, 2016). In 2017, METRO hosted a forum on " I-O Psychology in NYC: Its Fascinating History and Future." This segued into an expanded forum hosted by the Manhattan Psychological Association in 2018, where five experts with a combined 180 years of experience shared their impressions and unpublished information. This multiauthored essay shares our insights on developments in I-O psychology in New York City over past decades.

One important point that emerged from this forum was the unpublished but valuable information that becomes lost with time. For example, Virginia Schein (below) described her experiences in the 1970s, when executives were surprisingly resistant to her team's proposals for now-common practices like flex time and employee attitude surveys. To the extent that there are local I-O groups like METRO in over 30 cities around the USA, it may be eye opening for each group to invite a few elders to recall their now-forgotten experiences with younger colleagues and students, orally if not in writing, and perhaps share these with readers of *TIP*.

Melissa W. Search: The city of New York holds a rich history of experts and research in the field of I-O psychology, spawning renowned work that has influenced generations of students, psychologists, educators, and major corporations. However, these contributions were only discovered after years of challenging archival research, as information is scarce on these early influences in New York City. When I began doing my Honors research in 2016 on the history of I-O psychology in New York City, I found that there are at least six excellent histories of I-O psychology (three of them by New Yorkers). Yet there was no published article on this topic—not even a simple list of noted New York I-O practitioners or institutions, which I took it upon myself to develop. Moreover, I created a 20-item quiz as an exercise before my presentations at universities and professional groups in New York to stimulate discussion and see what students and colleagues already knew about I-O history (Woroschinski & Takooshian, 2017). Along with my archival research, I have had the honor of gaining first-hand knowledge by speaking with local I-O psychologists, who shared valuable but unpublished information—including the three esteemed I-O experts below.

Walter Reichman: Inside the AT+T Longitudinal Study. I have always been in awe of those psychologists who committed themselves to longitudinal research to study human behavior over time. I have been fortunate enough to be a part of two such landmark pieces of research, The Career Pattern Study conducted by **Donald Super** at Teachers College of Columbia University, and the Management Progress Study conducted by **Douglas Bray** and **Ann Howard** at AT &T. Both studies followed subjects for 20 years and I was lucky enough to be involved in the final year. If I were not a born, bred, and educated New Yorker who chose to continue living and working here, I would have missed this opportunity.

I was a research assistant on the Career Pattern Study at Teachers College. I was the same age as the 140 boys from Middletown, New York who were being followed, and I wrote my dissertation based on this data. Because the research was conducted at Teachers College, the results were almost always implemented in the educational processes of the country. One of the results of the study was the

recognition that boys at age 15 are not ready to make career decisions, and this led to the abandonment of high schools dedicated to training boys for specific jobs and promoted general academic education in the high schools.

Dr. Super had been supported by government grants for 19 of the 20 years. In the 20th year, his funding was not renewed. All the many graduate students reached out to collect data on the last year of the study. I had the opportunity to meet four of the "boys," now age 35, and review their vocational history since they were 15. It was a fascinating learning experience on the process of vocational development. Two of them stand out to this day. Barely articulate at 15, one was a pilot on Air Force One and the other was a high-ranking FBI agent. The other two had good jobs and successful lives but not ones I can recall.

The Management Progress Study was conducted at AT&T on 240 young men who were entering management training programs. Two-thirds were college graduates and one-third had been designated as high potentials from within AT&T. They were given 3 and a half days of psychological testing, including personality, interests, cognitive, projective tests, and interviews. For this study, Doug Bray developed the Assessment Center, which was a major contribution to selection and promotion of managers. After the data were collected, the research team made predictions on the managerial level the men would achieve. The first predictions were found to be about 60% accurate. There were follow- up studies at 8, 15, and 20 years. I was involved in the 20th year follow-up, which was conducted at the luxurious Essex House Hotel on Central Park South in NYC. As part of the last follow-up, we showed the men their scores and assessments across the years and asked them to describe what was going on in their work and personal lives that influenced the change in their test scores. I heard interesting and meaningful life stories of the reciprocal influences of life, family, and career. At the risk of an oversimplification of the data, it seems that the greatest predictor of managerial success was the continuity of a high need for achievement. One interesting analysis were the scores on the Achievement and Affiliation scales of the Edwards Personal Preference Inventory. For those who were at the lower management levels, as the need for affiliation increased over the years, the need for achievement declined. For those at the higher ranks the needs for achievement and affiliation remained high and at (?) the expense of other needs.

Virginia E. Schein: Personnel Research Tales from the 1970s in New York City. I want to share with you a few tales about I-O personnel research in the 1970s in New York City. In those days, most I-O practitioners were in-house psychologists; that is we worked for large business organizations. There were I-O psychologists at J.C. Penney, Merrill Lynch, Equitable Life, Prudential, MetLife, IBM, and AT&T among others. After graduate school at NYU, I worked first at the American Management Association, then at the Life Office Management Association, and finally as director of personnel research at Metropolitan Life Insurance Company.

1. *Attitude surveys.* Compared to now, most managers were very resistant to attitude surveys. It was an uphill climb to implement an attitude survey program. The Mayflower Group was founded in 1971 so that we could share data and have normative data to present to management. The first Mayflower Group companies were like Noah's Ark, two from each industry. There were I-O representatives from MetLife and State Farm, Xerox and IBM, Ford and General Motors, and so on. One of the most significant tasks for the 12 or so of us who were founding members was to develop and agree on 20 core items that we would all use in our surveys. It was a lengthy and frustrating experience, but we did it, and those items are still being used today.

2. *Flex time.* MetLife was the first company in New York City to implement flexible working hours. That too was an uphill battle. Although it was popular in Europe, managers in the US were resistant to something like flexible working hours. At MetLife, employees worked from 9

to 5. If you were late, even 10 minutes, your pay could be docked. Supervisors would say, “If I don't watch my employees, they won't work.” I convinced senior management to test flexible working hours for 4 months in five different work units. My staff and I used a quasi experimental research design to measure the effects of flex time on productivity. Based upon the finding that flex time had no adverse effects on productivity, we were given the go ahead to implement flex time in the entire company.

3. *The law.* In the 1970s, implementation of Title VII of the Civil Rights Act of 1964 was an important focus of personnel research activities. For example, the 1971 *Griggs v. Duke Power Co.* Supreme Court case shined a bright light on minority populations and test validation, an I-O area of expertise. The 1973, the AT&T consent decree was also very significant. The EEOC charged AT&T with discrimination against minorities and women. In particular, this was one of the first cases that focused on women in management or the lack thereof. A settlement was reached in January of 1973. I do believe that almost every CEO in New York City was waiting by the phone to find out what that outcome would be. AT&T agreed to pay $15 million in back pay, mainly to women, and something like $23 million for future efforts to improve the situation. This decision, in particular the financial teeth behind it, spurred companies to implement programs to enhance the status of women in management, such as MetLife’s and IBM’s awareness programs.
4. *Gender*. In the 1970s there were very few female I-O practitioners in the New York City area. In additional to myself, there was **Pat Dyer** at IBM and **Mary Tenopyr** and **Virginia Boehm** at AT&T and perhaps one or two others. I was the first woman to receive a degree in industrial psychology from NYU and the first female I-O president of METRO.

Looking back, it was an exciting time to be a practicing I-O psychologist in New York City. We were a collegial group and all doing interesting and for the time, cutting-edge research in our companies.

Allen I. Kraut: Why I belong to METRO. METRO (The New York Metropolitan Association for Applied Psychology) is the largest “local” organization of I-O (mostly) psychologists in the USA. It currently has about 215 active, paid members and a mailing list of 2,200. METRO meets monthly, about 10 times a year with a guest speaker, refreshments, and time to mingle.

I have belonged to METRO for more than 40 years. I kept showing up at meetings through my many years working at IBM and later while teaching at Baruch College, CUNY, and I am still a member. Once in a while, people ask me why. That is a fair question and one that deserves a thoughtful answer.

Some recent studies (Farmer, Shapiro, Sylvan, Zugec, and Whelan, 2015) show that the major reasons most people belong to local I-O groups (like METRO) are networking, professional development, fellowship and, of course, the particular topic (or person) being presented.

These same reasons account for me showing up at METRO meetings. I enjoy networking and the fellowship of my friends, and there has rarely been a meeting where I did not learn something useful.

When I first joined, METRO met in the Harvard Club, courtesy of a former METRO President, Henry Morgan of the Psychological Corporation. The club exuded classiness and old money. I loved the atmosphere. After Morgan passed away, we met in the Grand Hyatt and then at the Helmsley Hotel until their fees became unreasonable. Now we are comfortably at an NYU location; these changes testify to METRO's adaptability (and mine).

George Hollenbeck, a former METRO president who worked at Merrill Lynch much of his career, refreshed my memory of the early days with the following comments:

> NYC had a big chunk of applied psychology in those days… including one of the early consulting firms, Richardson Bellows and Henry, and companies were using psychology...like IBM, GE, ATT, J C Penney, Metropolitan Life, Prudential in Newark, Equitable Life, ITT… The concentration of people in Manhattan meant that getting to meetings was easy.

Back in the 1970s, someone suggested that we have a sit-down dinner, with a speaker, on Groundhog Day. This became a tradition that lasted about 3 decades. Two guest speakers stand out in my memory:

The famed anthropologist Margaret Mead, whose work covered the sexual mores of tribes in the South Pacific, was a fabulous and entertaining speaker and left me with an important message. Namely, that much of social science reinvents the wheel because the researchers have not looked back in the literature to studies that have already shed light on what we are interested to know. That is a useful fact to remember.

At another meeting, soon after Arthur Jensen published some controversial articles on Black–White differences in intelligence, he was invited to speak at METRO. He started by apologizing for reading his talk, but said he wanted to say exactly what he intended to say.

As soon as he finished, several members of the audience attacked him for his statements, which they said were anti-Black. Each time he calmly answered, "I did not say that. Let me repeat what I said" and then he read from his paper exactly what he did say, which was often quite different from the accusation.

Those exchanges showed that controversial research can get very heated, and it is best to be prepared for follow-up discussions!

Many other meetings have been informative and gave members a great chance to meet old friends and make new friends. Exchanging news and professional gossip are also worthwhile activities.

Of course, our membership has changed somewhat, with a much smaller proportion from industry than in the past, and more people coming from consulting practices and academia. METRO's vitality has survived many changes. It continues to adapt and to create experiences that are satisfying, thought provoking and helpful for professional growth, and I keep showing up.

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Some Related Links

TIP: http://www.siop.org/tip/masthead.aspx
SIOP groups: http://www.siop.org/tip/jan17/groups.aspx
Local groups: http://my.siop.org/Resources/IOGroups
METRO: http://my.siop.org/Resources/IOGroups
Minnesota: http://my.siop.org/Resources/IOGroups

I-O Helping Make the World a Better Place: SIOP Collaborating With Other Psychology Organizations at the United Nations

SIOP UN Committee: Mathian Osicki, Julie Olson-Buchanan, John Scott, Mary O'Neill Berry, Lori Foster, Deborah Rupp, Lise Saari, Nabila Sheikh, Walter Reichman, Drew Mallory, Aimee Lace, and Dan Maday

In 2008, the Society for Industrial and Organizational Psychology (SIOP) submitted an application to the United Nations' Economic and Social Council (ECOSOC) requesting special consultative status as a non-governmental organization (NGO). The ECOSOC is one of six organizational pillars within the United Nations established by the United Nations (UN) Charter in 1945, and it serves as the central forum for formulating policy recommendations regarding international economic and social issues (ECOSOC website: https://www.un.org/ecosoc/en/about-us). SIOP's application process with ECOSOC spanned the terms of four SIOP presidents and countless hours on application forms and special requests. On Aug 1, 2011, the efforts finally paid off as SIOP was officially granted NGO special consultative status with the ECOSOC (Scott, 2011).

Shortly after obtaining NGO consultative status, the SIOP UN Committee developed a charter and set of guiding principles by which they operate in support of the UN mandates around topics such as peace and security, climate change, sustainable development, human rights, terrorism, humanitarian and health emergencies, gender equality, decent work, governance, and more.

The SIOP UN committee mission as it reads today: The Society for Industrial and Organizational Psychology (SIOP) United Nations team seeks to bring theory, research, and practice of work psychology to support the achievement of UN mandates (as found on the SIOP UN team website: http://www.siop.org/Prosocial/UN.aspx).

Today, the SIOP UN team is composed of five principal SIOP representatives (in the New York City United Nations location), four principal SIOP representatives (in the Geneva United Nations location) as well as a handful of honorary, former representatives, and intern members who have made direct contributions to a number of the UN mandates over the past few years. For example, the team has delivered presentations at the UN to share practice and theory around topics such as women in the workplace, survey design, and humanitarian work psychology to name a few. The team has also tapped the larger SIOP membership for assistance on position papers and consultation on selection and performance management processes. Other projects and programs the SIOP UN team have been involved in at the UN include supporting the UN Global Compact mission by helping usher academic institutions into the community, holding workshops/brownbags for UN staff on I-O topics such as effective survey design and promoting I-O related jobs at the UN at an annual I-O psychology career fair. Group members have also published books linking I-O and the UN. For example; Walter Reichman (2014) authored "Industrial and Organizational Psychology Help the Vulnerable: Serving the Underserved," and Mary O'Neill Berry (2016) coedited "Humanitarian Work Psychology and the Global Development Agenda: Case Studies and Interventions."

In addition to these SIOP UN team specific efforts, SIOP served as a founding member of a Psychology Coalition of NGOs Accredited at the United Nations (PCUN).

Members of the PCUN collaborate in the application of psychological principles, science, and practice to global challenges of the UN agenda. As stated on its website (https://psychologycoalitionun.org) "The PCUN seeks to accomplish this overarching aim through advocacy, research, education and policy and program development guided by psychological knowledge and perspectives to promote human dignity, human rights, psychosocial well-being and positive mental health."

Some recent PCUN activities include: submitting written and oral statements on psychology-related themes to UN entities and commissions, issuing statements or clarifications on important global issues relevant to well-being, mental health, and human behavior, conducting panels and parallel events as part of UN meetings, influencing the wording of a UN Sustainable Development Goal (SDG) to address psychological well-being, working with specific missions to apply psychological principles to address critical issues.

The SIOP UN team is currently leading a PCUN Infrastructure Task force to help improve the basic foundational infrastructure of PCUN. The task force is leveraging I-O theory and research around goal setting, feedback, team dynamics, motivation theory, leadership theory, organizational design, and basic project management to help sustain the group's existence and future effectiveness.

The journey toward achieving SIOP's special consultative status with the UN has been long but rewarding, with significant progress made over the last 7 years. That being said, the group, and the field, is still in the early stages of understanding where I-O theory and knowledge can be most effectively shared to aid the UN and its 193 member states in its life-sustaining global mandates. As members of the SIOP UN team, we will continue to strive to make an impact on the UN's SDGs and Global Compact, and we look for ongoing input from SIOP membership—maybe you want to help? (SIOP UN Committee website: http://www.siop.org/Prosocial/UN.aspx; United Nations (UN) Website: http://www.un.org/en/index.html).

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Successful Practice Events at the SIOP Conference

Rob Silzer, Lynn Collins, Ben Porr, and Mark Morris

The Professional Practice Committee chairs and members delivered numerous highly successful events for SIOP practitioners at the Chicago SIOP conference.

Over the last several years many new programs and initiatives have been introduced and the response has been overwhelmingly positive. Thanks go to the many SIOP practitioners who attended and supported practice events.

Here is an overview of the key events and attendance at Professional Practice events at the SIOP conference.

1. **Individual Leadership Assessment Course**

The Practice Committees have been working to introduce Advanced Professional Development for experienced SIOP practitioners. The objective is to provide extended professional training and development of Practice skills, expertise and knowledge.

At the SIOP conference the first two modules of a six-module course on Individual Leadership assessment were delivered for SIOP experienced practitioners.

- **Module 1: An Overview for Experienced Assessors**
- **Module 2: Interviewing Skills for Leadership Assessment**

The response was extremely positive. Both modules completely sold out many weeks before the conference, and in fact were oversubscribed. Additional conference attendees were eager to get into the course.

There were 40 participants in Module 1 and 36 participants in Module 2. They were a highly select and experienced group of practitioners with an average of 14 years of leadership assessment experience. The participants expressed great appreciation both the advanced level of the course as well as the extensive assessment experience of other participants. Peer learning was an important and powerful part of the course. They were able to learn from each other's experience as well as the experience of the course leaders. One participant stated "these are my people." The group was very interested in participating in the remaining four course modules and encouraged the development of additional advanced courses.

The success of this Leadership Assessment course launch clearly demonstrates the strong interest among SIOP practitioners for advanced professional development, particularly in I-O practice areas that are not taught in graduate programs.

The course leaders included **Rob Silzer, Sandra Davis, Vicki Vandaveer, John Fulkerson,** and **Andrea Hunt,** each of whom had 35 years of leadership assessment experience. Thanks also to **Gavin O'Shea, Rob Michel,** and **Alyson Marguilies** who coordinated the course modules.

A major thank you to the course leaders and the participants for making this a highly successful Practice learning and development initiative.

2. **Early Career Practitioner Consortium (ECPC)**

The second annual SIOP Consortium for Early Career Practitioners was held during the SIOP conference. The consortium focused on the career needs and aspirations of practitioners who have up to 5 years of postdegree work experience.

At the ECPC, 35 Early Career practitioners were joined by 12 experienced SIOP members who served as mentors. The consortium was designed to help practitioners discover their own professional strengths and development opportunities, learn about the variety of career paths available to I-O psychologists and participate in small group mentoring sessions with experienced practitioners.

The highest rated aspects of the program were participating in the small group mentoring sessions (96% favorable) and learning about the variety of career paths (93% favorable). Across the participants 80% would recommend others attend the Early Career Practitioner Consortium in the future!

Congratulations and thank you to **Vince Conte** and **Ashley Guidroz** for designing, organizing, and delivering this highly success program. Also thanks to the experienced SIOP members who served as mentors.

3. **Speed Mentoring**

The successful Speed Mentoring program was back by popular demand! The program was designed for early career professionals with fewer than 8 years of professional experience (with a limited number of seats available for student participants). Participants had the opportunity to participate in two 30-minute roundtable topic-driven discussions. It is a terrific opportunity for practitioners to seek guidance, knowledge, and wisdom from highly seasoned professionals.

We had a full house of 55 practitioners (and some students) who received mentoring from expert mentors. The professional mentoring topics included: Innovations in selection, high potentials and future leaders, driving a high performance culture, talent analytics/big data, and internal versus external consulting. The student mentoring topics included building a personal brand and transitioning from student to practitioner.

The participant feedback was highly positive. We are looking forward to the 10th annual Speed Mentoring event at next year's SIOP conference at the National Harbor.

Thank you to **Jerilyn Hayward, Soner Dumani, Michael Pate,** and **Donna Kingry** for another successful Speed Mentoring.

4. **Speed Benchmarking**

The Professional Practice Committee hosted a new Speed Benchmarking event this year at the SIOP Conference for midcareer and senior level internal/external practitioners. I-O practitioners with 8 or more years of business or consulting experience had the opportunity to network and benchmark with other subject matter experts facing similar challenges and to share best practices.

More than 50 experienced I-O practitioners got together to discuss these topics: performance management, big data/artificial intelligence, legal issues, succession planning, workforce planning, selection/validation, interviewing, surveys, coaching, and leadership development.

Response to the event has been very positive based on feedback from both facilitators and participants. One participant said "If I could dream of what I want SIOP to be, this is it!" That certainly is a powerful testimonial for this program.

We are looking forward to hosting A Speed-n-Benchmarking event for mid–late career practitioners again at next year's SIOP conference.   Be on the lookout for upcoming communications that outline the highlights of these benchmarking discussions.
Thank you and congratulations to **Jerilyn Hayward, Soner Dumani, Michael Pate,** and **Donna Kingry** for a delivering a highly successful new initiative for SIOP practitioners.

5. **Practitioner Network Reception**

The 2nd Annual SIOP Practitioner Network Reception was held at the SIOP conference. It provided a terrific opportunity for SIOP members to network and connect with each other in the middle of the conference. The reception featured numerous fun activities including a friends and colleagues photo booth and a networking game challenge to earn a free drink. It also featured Chicago-style food such as the popular deep dish pizza, hot dogs, sausages, and popcorn.

Over 400 SIOP members joined the reception. Over 100 members successfully completed the game challenge and earned a free drink. In addition 250 shot glasses and many other take away items were given out, and over 100 free shots were given out. It was a rousing success again this year and will definitely continue at next year's conference.

Thanks and congratulations go to **Emily Solberg, Jerilyn Hayward, Caitlin Cavanaugh,** and **Julia Le-one** for another great networking reception that was widely enjoyed.

6. **Great I-O Psychology Practice Debate**

The Great I-O Psychology Practice Debate was held at the SIOP Conference. It featured five leading I-O practitioners who addressed critical challenges:

1. I-O practitioners should be psychologists and have psychologist training to provide some of the services in our profession
2. Licensing or professional certification should be required to practice in I-O psychology
3. There are major distinctions in the professional work and skills of I-O psychologists and other competing professionals
4. I-O psychology practitioners will become more relevant and important to individuals and organizations in the future

The leading practitioners, Rob Silzer, **John Scott, Doug Reynolds, Jeff McHenry,** and **Erica Desrosiers,** participated in four dynamic and energetic debates. The audience consisted of over 500 SIOP members, in a full meeting room and they stayed to hear all four debates.

It was a highly successful conference debate and the huge audience turnout suggests that SIOP members are eager to explore and better understand the leading professional issues for I-O practi-tioners.

Great thanks go to the presenters for their hard work and for exploring and sharing different views on leading Professional Practice issues.

Other Professional Practice Activities

There are now three Professional Practice Committees:

- Professional Practice - Learning Resources Committee
- Professional Practice - Career Development Committee

- Professional Practice - Engagement Committee

These committees are hard at work developing and delivering ongoing and new programs and initiatives for SIOP practitioners.

Look for these current and upcoming activities, programs and services:

- Professional Practice Update Newsletter
- The I-O Psychologist Entrepreneurs Initiative (IOPE)
- Practitioner Needs Survey
- An initiative to connect with I-O regional groups
- Additional offerings related to advanced professional development for experienced practitioners
- *TIP* Bridge column: "The Bridge: Connecting Science and Practice".
- Practitioner Resources Videos posted on SIOP's Facebook, Twitter, and LinkedIn sites
  - New White Papers: *Employee Engagement* by **Jason Read**
  - *Data Visualization* by **Evan Sinar**
- New practice webinars such as the upcoming ones on training ROI and performance management
- New Professional Practice books that are now in development

2018 Leading Edge Consortium

As you know SIOP will offer another major program for I-O psychology members and practitioners. The 2018 Leading Edge Consortium will be held October 18-20, 2018 at the Renaissance Hotel in Inner Harbor Baltimore (workshops on October 19).

The topic is **High Potentials: Identifying, Developing and Retaining Future Leaders**

The Organizing Committee includes Co-Chairs Rob Silzer and **Allan Church,** and Committee Members John Scott, **Lorraine Stomski, David Baker, Karen Grabow,** and **Raphael Prager.**

The committee is working hard to develop an outstanding program with many learning and networking opportunities. There will also some new innovations and surprises this year to enhance the consortium experience. Look for announcements this summer.

Conclusion

Your involvement and support for these programs matters! The future development and success of SIOP programs for I-O Practitioners depends on member support and engagement. Please participate and get involved.

See you in Baltimore.

Members in the Media

Mariah Clawson
SIOP Communications Intern

Awareness of I-O psychology has been on the rise thanks to articles written and featuring our SIOP members. These are member media mentions found from February 1, 2018 through May 31, 2018.

We scan the media on a regular basis but sometimes articles fall through our net. If we've missed your or a colleague's media mention, please send them to us! We push them on our social media and share them in this column, which you can use to find potential collaborators, spark ideas for research, and keep up with your fellow I-O practitioners.

The Profession of I-O Psychology

I-O psychology has advanced humanistic ideals and helped improve society at large, according to **William Jimenez** and **Mahima Saxena.**

Michael Crant defines I-O psychology as a field that generally addresses bigger picture issues.

Adam Grant's podcast *WorkLife* has been named one of five podcasts graduates should download according to Forbes.

The field of I-O psychology is a growing college major. **Sy Islam** introduces the career to future I-Os on Ram Nation Radio for Farmingdale State College.

Gender and Diversity Issues

Why are women rude to other women at work? **Allison Gabriel** authored the study and discusses what to do about it with Today.com.

Millennials? Generation X, Y, Z? Are they really all the same? **David Costanza** argues evidence of generational differences are lacking.

For the *Psychological Bulletin*, **Kevin Hoff** conducted a meta-analysis of 49 longitudinal studies on vocational interests, exploring when gender discrepancies appear and change across various developmental periods.

Michelle Goro's research suggested differences between millennials and nonmillennials are likely more complicated than the general, widely accepted beliefs.

Madeline Heilman describes two aspects of gender stereotyping in the workplace: descriptive bias and prescriptive bias for Forbes.

The ideas that the gender wage gap is a true distinction in talent between men and women is a myth, according to Sy Islam.

I-O Activism

Community healthcare in Zimbabwe is making great strides thanks to **English Sall**, who says women's health is the key to economic progress.

Diane Damos' work as an aviation psychologist is celebrated for bringing psychological science into creative and practical directions.

Career Advice From and For I-Os

Brainstorming is an important step of the innovation process. However, Adam Grant says most people are approaching the brainstorming process incorrectly.

Mid-career is a great time to reflect on whether you are happy in your current career path, according to **Angela Howard**.

Popular Press Topics

Student athletes have a lot on their plate and **Paul Baard** believes student athletes should be intrinsically motivated.

Fitbit-like technology to evaluate employee performance? **Tara S. Behrend** cautions employers wanting to implement this wearable technology.

Are you an extrovert? An introvert? A little bit of both? Adam Grant analyzes your answers from this quiz for TED.com

In a *Forbes* article, **Ekta Vyas** says leveraging the science of emotional intelligence may be a key strategy to gaining insights into emotional responses.

Amy Cooper Hakim shares tips on how to improve your Uber experience, both from the driver and passenger perspective.

Employee Management, Motivation, and Turnover

Allan H. Church identifies employees who fall below expectations on one or more criteria, called C players, and what to do about them.

Amy Cooper Hakim says professionals in their 50s will reap rewards from serving as a mentor to younger workers.

Facebook could help you find new employees! **Elliot Lasson** believes it is vital for companies to continuously reexamine the channels through which they are engaging their target market for job opportunities.

Howard Klein thinks the need for business to help employees feel comfortable with moving on from quondam commitments is important.

Using language to communicate a real desire for diverse job candidates can help grow your potential employee pool, according to Sy Islam.

Hiring managers should ask better follow-up questions in interviews to gather valid data, **Jamie Winter** says.

People feel undercompensated relative to their coworkers. **Jay Finkelman** calls that equity theory and believes it is present in the workplace.

Lale Yaldiz, Donald Truxillo, and **Leslie Hammer** conducted a survey and found older workers tend to feel more stress than younger workers when their employers fail to provide support and resources needed to do their jobs well.

Coming into work each day with a sense of foreboding can have lasting health consequences says **Alicia Grandey.**

Employee Burnout, Work–Life Balance

Caitlin Demsky, Charlotte Fritz, Leslie Hammer, and **Anne E. Black** study how repetitive thoughts on rude behavior at work results in insomnia for the *Journal of Occupational Heath Psychology*.

Venting can keep us stuck in negativity rather than being more solution focused, according **to Christine Allen.**

For a *Hartford Business* article, Alicia Grandey says recognizing employees should have autonomy on how they handle a situation can prevent burnout.

If individuals perceive themselves to be effective at managing demands of work and personal life, they are more likely to be happier in their overall life, according to **Anna Lorys'** research.

Michael Leiter defines rudeness as a time when someone behaves in a way that doesn't align with the way someone else might think is appropriate.

Leadership, Management, and Organizational Culture

There are four leadership behaviors that can foster innovation in your company, according to **Martin Lanik.**

Ekta Vyas writes for *Forbes* about the need to align HR programs and practices to business needs and suggests that a design thinking paradigm might be helpful in navigating fluid business environments.

Paul Baard explores the necessary art of effective listening and how listening entails both hearing the message being sent and interpreting it correctly.

Jia Hu, Berrin Erdogan, Kaifeng Jiang, and **Talya Bauer** question whether humble leaders make more effective leaders in their *Harvard Business Review* article.

Top 5 Reasons to Come to This Year's APA Convention: August 9–12 in San Francisco

C. Allen Gorman
2018 APA Program Chair

Registration for this year's APA convention is now open! Here are just a few of the many reasons that you should attend:

1. Phenomenal Invited Speakers and Outstanding Invited Symposia

- **Cristina Banks:** *How to Increase Wellness Program Adoption and Employee Participation Using Principles of Psychology*
- **Georgia Chao, Gary Latham, Stephen Stark, Jeff McHenry:** *What's Happening at APA and SIOP? Q&A With Division 14/SIOP Council Representatives*
- **David Morgan**: *Find, Grow, Keep---A Crash Course in Applied People Analytics*
- **Fred Oswald:** *The Identity and Impact of SIOP: A Reliability and Validity Approach*
- **David Peterson:** *The Future of Executive Coaching: Faster, Better, Transformational*
- **Roni Reiter-Palmon***:* *Using I-O Psychology to Improve Patient Safety*

2. Thought-Provoking Plenary Sessions and Collaborative Programming from Inside and Outside I-O:

- **Nathan Ainspan:** *Serving Those Who Served Us: Gaining Employment at the Departments of Defense and Veterans Affairs*
- **Sharon Berry:** *The State of the Psychology Training Pipeline and Workforce*
- **Chester Hanvey:** *Employment Practices in the Tech Industry---Opportunities and Risks*
- **Sally Harvey:** *Developing Specialty Practice Guidelines: The Case for Operational Psychology; the Many Faces of Operational Psychology*
- **Rodney Lowman:** *Virtual Psychological Consulting: Ethics, Guidelines, and Best Practices; Psychological Consultation in South Africa: Integrating Country Context, History, and Culture*
- **Michelle Perfect:** *Mentoring Across Developmental Levels and Contexts to Underrepresented Trainees and Professionals*
- **Mark Whitmore:** *Representation of Women in High-Tech---Attraction-Selection-Attrition Framework Gone Wrong?*
- And more! See http://convention.apa.org/agenda

3. Over 60 competitive posters and talks from SIOP members, on topics ranging from leadership to motivation to employee well-being… plus hundreds of papers on measurement, group dynamics, personality, and more from other APA divisions!

4. A social event on **Thursday, August 9** (time and place TBD)—mingle with old colleagues and meet new ones in a low-key setting. Division 14 has on average 100 attendees each year.

5. The city of San Francisco!

Be sure to register by **June 30** to take advantage of the early bird registration rate!

It's also not too early to start thinking about next year's convention in Chicago!

How about putting together a collaborative program? A collaborative program pulls together multiple perspectives on a significant issue for psychologists and society at large, involves more than one core area of psychology (i.e., science, practice, education, public interest), and reflects interdisciplinary and relevant aspects of diversity. The deadline for submitting collaborative programming is **October 12**. Collaborative proposals:

- should be 1- or 2-hour session proposals that highlight collaborative ideas and integrative approaches;
- must have at least two participants and a chairperson (individual presentations (paper/poster) will not be considered);
- are encouraged that
    - incorporate innovative presentation formats;
    - include participants across all career stages, settings, and fields; and
    - integrate psychological science and practice

Collaborative proposals are evaluated on the following criteria: broad appeal, importance of work, current and timely topic, originality and innovativeness, interactive/creative format, scientifically/empirically based, and attention to diversity.

Divisions you might want to consider collaborating with include:

- Div 1: Society for General Psychology
- Div 2: Society for the Teaching of Psychology
- Div 5: Quantitative and Qualitative Methods
- Div 8: Society for Personality and Social Psychology
- Div 9: Society for the Psychological Study of Social Issues
- Div 13: Society of Consulting Psychology
- Div 18: Psychologists in Public Service
- Div 19: Society for Military Psychology
- Div 21: Applied Experimental and Engineering Psychology
- Div 35: Society for the Psychology of Women
- Div 38: Society for Health Psychology
- Div 41: American Psychology-Law Society
- Div 45: Society for the Psychological Study of Culture, Ethnicity, and Race
- And many more! Check out the listing of divisions here: http://www.apa.org/about/division/index.aspx?_ga=1.260482957.1628625474.1464221820

If you are interested in putting together a collaborative proposal, we can help you find collaborators! Please contact me (gormanc@etsu.edu) or the 2019 Program Chair, Clair Reynolds Kueny (kuenyc@mst.edu). Welcome to the team, Clair!

Submissions for all types of programs (collaborative proposals: due **October 12**; other program submissions: due **December 1**) will be received through the official APA Convention website (http://www.apa.org/Convention/proposals.aspx).

See you in San Francisco!

SIOP 2019 34th Annual Conference: National Harbor, Fort Washington, Maryland, April 4-6, 2019 Preconference Workshops April 3, 2019

Tracey Rizzuto
Program Chair, SIOP 2019, Louisiana State University

Scott Tonidandel
Conference Chair, SIOP 2019, UNC Charlotte

SIOP will continue the momentum of record-breaking conference attendance and superb programming at the 2019 SIOP Conference at National Harbor in Fort Washington, Maryland. The “I Am SIOP” theme will highlight collaborations, demonstrate impact through partnerships, and feature multidisciplinary approaches to advance our science and practice, with several new features and an outstanding lineup of speakers! Planning for this 34rd Annual Conference is underway, so mark your calendars now!

Thursday Theme Track

The Theme Track will offer a full day of programming designed to bring President **Talya Bauers’** vision of ***I am SIOP*** to life. Chair **Elizabeth McCune** and her committee are assembling an exceptional lineup of presenters and call for an engaged SIOP audience to debate, create, learn from, and engage in dynamic and interactive sessions.

The Theme Track promises to provide a day of engaging, provocative, and inspiring sessions. They are designed to elicit discussion and novel ideas. These sessions will be scheduled back to back in the same room. We invite you to stay all day or attend only the sessions of most interest to you.

Special Events

This year we are excited to feature several special events throughout the conference, planned by Special Sessions Chair **Katina Sawyer** and her committee. At SIOP 2019, we will seek to build interest and excitement around emerging themes that inspire innovative ideas with insights from top thought leaders in our field.

Friday Seminars

Friday Seminars offer a unique educational opportunity within the main part of the conference. These 3-hour sessions are the only extended-length sessions on the schedule and take place on Friday. The sessions are intended to provide a rich immersion experience for attendees on timely, cutting-edge content areas presented by true content experts. Each session is shaped around learning objectives in order to ensure that professional developmental goals are met. Please note that Friday Seminars require advance registration and an additional fee. This year’s Friday Seminars committee is led by **Megan Thorton-Lugo.**

Featured Posters

We will once again showcase the top-10 rated posters at an evening all-conference reception. Come view some of the best submissions to the conference while enjoying drinks in a relaxed atmosphere with the presenters. If you’ve never been to this event, make 2019 the year you check it out!

Communities of Interest

Interested in an “open space” SIOP format that is attendee driven, informal, and focused on a topic of particular interest to you? The Communities of Interest allow you to meet new people, catch up with colleagues, learn about new advances, discuss ideas, have a provocative discussion, and play a part in driving breakthrough research and practice ideas on a hot topic at the forefront of I-O psychology. These sessions are designed to enhance existing communities and create new ones around common themes or interests. They have no chair, presenters, discussant, or even slides. Instead, they are discussions shaped on the basis of the audience and informally moderated by one or two facilitators with insights on a topic of interest. These are great sessions to attend if you would like to meet potential collaborators, generate ideas, have stimulating conversations, meet some new friends with common interests, or expand your network to include other like-minded SIOP members. Chair **Dustin Jundt** and the rest of the COI Committee are lining up some great sessions and facilitators for this year’s conference.

Continuing Education Credits

The annual conference offers many opportunities for attendees to earn continuing education credits, whether for psychology licensure, HR certifications, or other purposes. Information about the many ways to earn CE credit at the SIOP annual conference can be found at http:/www.siop.org/ce and will be continually updated as more information becomes available.

Closing Plenary and Reception

Your Conference Committee is in the process of finalizing our closing plenary speaker. We will follow the closing plenary with our closing reception. The conference committee invites you to join us on Saturday evening at a themed closing reception that will be filled with music, dance, and delicious food.

The Conference Hotel

The Gaylord National, set on the banks of the beautiful Potomac River, offers an array of attractions and spacious accommodations for our conference. Located in Fort Washington, Maryland, the hotel is a short drive from Washington, DC and offers a range of dining and entertainment on site. Please see the SIOP Web page for details on booking your room and taking full advantage of all the SIOP conference has to offer.

There is much anticipation for SIOP 2019. We hope we’ve sparked your excitement the conference. We can’t wait to see you there!

2018 Frank Landy SIOP 5k Fun Run Results

Thanks to everyone who ran the 2018 Frank Landy 5k Fun Run in Chicago. Congratulations!!

Top 10 Men

Name	Place	Time
Galen Snyder	0:17:12	1
Dylan Sorman	0:19:09	2
Tyler Slezak	0:19:27	3
Filip Lievens	0:19:29	4
Robert Brusso	0:19:31	5
Merrill Levitt	0:20:29	6
Aidan Johnson	0:21:28	7
James Beck	0:22:01	8
Oren Shewach	0:22:21	9
Jason Randall	0:22:30	10

Top 10 Women

Name	Time	Place
Sarah Mulvey	0:20:03	1
Deborah Powell	0:20:10	2
Jamie Levy	0:22:33	3
Beth Anne Helgason	0:23:01	4
Melanie Standish	0:23:27	5
Chelsea Jenson	0:23:40	6
Amanda Munsterteiger	0:23:59	7
Beth Heinen	0:24:36	8
Ashlie Plants	0:24:51	9
Erica Barto	0:24:57	10

Age Group Winners

Men <30	
Galen Snyder	0:17:12
Dylan Sorman	0:19:09
Tyler Slezak	0:19:27

Women <30	
Sarah Mulvey	0:20:03
Beth Anne Helgason	0:23:01
Melanie Standish	0:23:27

Men 30-39	
Robert Brusso	0:19:31
James Beck	0:22:01
Jason Randall	0:22:30

Women 30-39	
Chelsea Jenson	0:23:40
Beth Heinen	0:24:36
Erica Barto	0:24:57

Men 40-49	
Filip Lievens	0:19:29
Nathan Kuncel	0:23:05
Charles Scherbaum	0:23:38

Women 40-49	
Deborah Powell	0:20:10
Jamie Levy	0:22:33
Liberty Munson	0:25:17

Men 50-59	
William Siegal	0:25:20
Kyle Lundby	0:26:11
Gerry Brandon	0:26:49

Women 50-59	
No runners	

Men 60-69	
Keith Macky	0:31:05
Paul Sackett	0:31:48

Women 60-69	
Debby Gebhardt	0:27:38
Pat Sackett	0:43:16

Men 70+	
M. Peter Scontrino	

Scientist/Practitioner

James Beck/Phil Walmsley	0:46:26
Kyle Morgan/Steven Toaddy	0:52:24
Katie O'Brien/Jason Randall	0:57:16

Four-Person Teams

University of Minnesota	1:29:35
Shaker International	1:38:51
Baruch College Team 2	1:40:10

Advisor/Advisee

Jan Corstjens/Filip Lievens	0:44:44
Charles Scherbaum/Elliott Larson	0:49:04
Craig Leonard/M. Gloria Gonzalez-Morales	0:59:55

Mixed Doubles

Sarah Mulvey/Matt Poepsel	0:49:32
Amanda Munsterteiger/Michael Nelson	0:49:55
Debby Gebhardt/Nicholas Walion	0:50:52

Complete Finishers List

Rank	Name	Time	Pace
1	Galen Snyder	0:17:12	5:32
2	Dylan Sorman	0:19:09	6:10
3	Justin Bown	0:19:18	6:13
4	Tyler Slezak	0:19:27	6:16
5	Filip Lievens	0:19:29	6:16
6	Robbie Brusso	0:19:31	6:17
7	Sarah Mulvey	0:20:03	6:28
8	Deborah Powell	0:20:10	6:30
9	Mickey Quinones	0:20:11	6:30
10	Merrill Levitt	0:20:29	6:36
11	Aidan Johnson	0:21:28	6:55
12	James Beck	0:22:01	7:05
13	Taylor Desantis	0:22:10	7:08
14	Andrei Ion	0:22:11	7:09
15	Oren Shewach	0:22:21	7:12
16	Jason Randall	0:22:30	7:15
17	Jamie Levy	0:22:33	7:16
18	Levi Nieminen	0:22:45	7:20
19	Joey Collins	0:22:55	7:23
20	Beth Anne Helgason	0:23:01	7:25
21	Nathan Kuncel	0:23:05	7:26
22	Desmond Leung	0:23:08	7:27
23	Nicholas Walion	0:23:14	7:29
24	Melanie Standish	0:23:27	7:33
25	Kevin Wynne	0:23:37	7:36
26	Charles Scherbaum	0:23:38	7:37
27	Chelsea Dunkel	0:23:40	7:37
28	James Kelley	0:23:46	7:39
29	Colby Nesbitt	0:23:50	7:41
30	Jakob Hull	0:23:54	7:42
31	Cory Cushenberry	0:23:57	7:43
32	Amanda Munsterteiger	0:23:59	7:44
33	Nathan Iverson	0:24:12	7:48
34	Doug Reynolds	0:24:13	7:48
35	Philip Walmsley	0:24:25	7:52
36	Darrin Brandis	0:24:35	7:55
37	Beth Heinen	0:24:36	7:55
38	Tyler Robinson	0:24:50	8:00
39	Ashlie Plants	0:24:51	8:00
40	Erica Barto	0:24:57	8:02
41	Joshua Caraballo	0:25:04	8:04
42	Craig Leonard	0:25:11	8:07
43	Jan Corstjens	0:25:15	8:08

44	Liberty Munson	0:25:17	8:09
45	William (Wes) Siegal	0:25:20	8:10
46	Elliott Larson	0:25:26	8:12
47	Marco Behrmann	0:25:32	8:13
48	C. Ryan Bearden	0:25:36	8:15
49	Michelle Goro	0:25:46	8:18
51	Daniel Koletsky	0:25:56	8:21
50	Michael Nelson	0:25:56	8:21
52	Thomas Kiger	0:26:06	8:24
53	Afonzo Johnson	0:26:07	8:25
54	Kyle Lundby	0:26:11	8:26
55	Kyle Morgan	0:26:12	8:26
56	Steven Toaddy	0:26:12	8:26
57	Manuel Gonzalez	0:26:24	8:30
58	Andrew Pepper	0:26:32	8:33
59	Charlene Zhang	0:26:36	8:34
60	Alexandria Klema	0:26:41	8:36
61	Gerard Brandon	0:26:49	8:38
62	Soohyun Lee	0:26:54	8:40
63	Julia Leone	0:27:00	8:42
64	Megan Bird	0:27:07	8:44
65	James Bright	0:27:15	8:47
67	Julia Bayless	0:27:17	8:47
66	Gregory Stevens	0:27:17	8:47
68	Stephen Gambardella	0:27:23	8:49
69	Debby Gebhardt	0:27:38	8:54
70	Manuel Gonzalez	0:28:07	9:03
71	Dale Werner	0:28:12	9:05
72	Paul Mastrangelo	0:28:32	9:12
73	Noelle Frantz	0:28:37	9:13
74	Eric Sydell	0:28:39	9:14
75	Zoe Ellis	0:28:52	9:18
76	Takudzwa Chawota	0:28:54	9:19
77	Karien Stadler	0:29:00	9:20
78	Kristen Randolph	0:29:25	9:28
79	Nivia Ayala	0:29:26	9:29
80	Matt Poepsel	0:29:29	9:30
81	Kaila Jacoby	0:29:30	9:30
82	Fernando Cifuentes	0:29:37	9:32
83	Anna Kallschmidt	0:29:39	9:33
84	Randall Lucius	0:29:48	9:36
85	Phillip Dillulio	0:29:55	9:38
86	Sheng Zhang	0:29:56	9:39
87	Yu-Chuan Yen	0:29:58	9:39
88	Joseph Manzewitsch	0:30:00	9:40

89	Ryan Riley	0:30:03	9:41
90	Jiayin Qu	0:30:07	9:42
91	Patrick O'Shea	0:30:14	9:44
94	Shannon Cheng	0:30:15	9:45
93	Tim McGonigle	0:30:15	9:45
92	Allison Traylor	0:30:15	9:44
95	Michaela Setzer	0:30:32	9:50
96	Keith Macky	0:31:05	10:01
97	Victoria Krumholtz	0:31:05	10:01
98	Kara McCord	0:31:06	10:01
99	Vivian Woo	0:31:35	10:10
100	Beth Armistead	0:31:41	10:12
102	Paul Sackett	0:31:48	10:15
101	Jose Cappes	0:31:48	10:14
103	Stephanie Payne	0:32:03	10:19
104	Christen Maher	0:32:29	10:28
105	Elizabeth McMillan	0:33:04	10:39
106	Clay Collin	0:33:06	10:40
107	Nhung Hendy	0:33:17	10:43
108	Mishael Luu	0:33:21	10:44
109	Adam Beatty	0:33:32	10:48
110	Logan Watts	0:33:49	10:53
112	Phillip Dillulio	0:34:27	11:06
111	Tamara Montag-Smit	0:34:27	11:06
113	John Gilbert	0:34:31	11:07
114	M. Gloria Gonzalez-Morales	0:34:44	11:11
115	Katharine O'Brien	0:34:46	11:12
116	Heather Carrasco	0:35:50	11:32
117	Gino Howard	0:35:53	11:33
118	Ian Armstrong	0:36:24	11:43
119	Samantha Clark	0:36:24	11:43
120	Lisa Votraw	0:36:38	11:48
121	Anne Thissen-Roe	0:36:43	11:50
122	Mohamad Sultan	0:37:14	11:59
123	Anna Brown	0:38:00	12:14
124	Paul Sackett	0:43:16	13:56

Zedeck-Jacobs Adverse Impact Research Grants

Milt Hakel, SIOP Foundation President

About Rick Jacobs and Shelly Zedeck

Back on April 18 in Chicago, a crowd of over 150 people gathered to honor recipients of the awards announced at the Foundation's Dessert Reception. **Sandra Davis** and MDA Leadership supported the event—thank you Sandra! Attendees viewed posters of the award winners, had their photos snapped, and celebrated the continuing advances taking place in our field of applied organizational science.

For me the program had many highlights, including recognizing Tom Bouchard as the second winner of the Dunnette Prize, proclaiming that the Foundation had achieved its goal of making cumulative distributions of over $1,000,000 fully 2 years ahead of the original 2020 target date, and announcing two new incubator fund start-ups, one by **Joel Lefkowitz** and the other by **Wayne Cascio**—you are cordially invited to contribute to these and any other Foundation fund at http://my.siop.org/Foundation/Donations. Just pick the fund to designate your gift – it's easy.

My greatest pleasure was in announcing that **Rick Jacobs** and his wife Jen made a significant contribution to the endowment for the Adverse Impact Reduction Research Initiative and Action (AIRRIA) Grants fund, which they had started several years earlier. It is the first time for the Foundation that a major endowment has been enlarged.

I've been grinning ever since Rick proposed this plan back in November: The award was to be renamed the Zedeck-Jacobs Adverse Impact Research Grant, with a new goal to build the endowment to $100,000 to yield larger grants. Rick's and my scheme was to surprise to **Sheldon Zedeck**, for whom the award is conamed.

I was elated to finally reveal the surprise, which came in the form of a pop quiz:

I asked the attendees to raise their hands if they recognized any one of these people, and then to keep their hands raised if they recognized two, and then if they recognized all three. By the time that people who recognized only Bob Guion or Mary Tenopyr dropped their hands, Shelly's hand was raised even higher because he and few others in the room recognized Ed Ghiselli.
Then I went on to the second and final pop quiz item:

Which Person Connects Ghiselli, Guion, and Tenopyr?

SIOP 2018 CHICAGO APRIL 19-21 SHERATON GRAND CHICAGO

The answer here came as a surprise to Shelly and as a shock to his wife Marty, standing next to him in this photo from his retirement party. The obvious question for them was "what's up?"
The answer appeared in the next slide:

Zedeck-Jacobs Adverse Impact Fund

This fund supports research for understanding, measuring, and reducing adverse impact in employment decisions.

Honoring Shelly Zedeck's remarkable career as an exemplary scientist-practitioner, the fund is a tribute to his role as a researcher, educator, and professional who defines the science of I-O Psychology put into practice.

The fund recognizes and celebrates all the knowledge Shelly has imparted to so many, including his long-time friend and former student, Rick Jacobs.

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About You and the SIOP Foundation

This year marked the inaugural award of the Hebl Grant for Reducing Gender Inequities in the Workplace. It recognizes a graduate student who is conducting a gender-related research project for his or her master's thesis or a doctoral dissertation. It was won by **Ashley A. Membere**, George Mason University.

This year also included the first call for applications from graduate students for the Graen Grants for Research on Design Thinking and New Professional Knowledge Workers.
The reality of the Foundation's 20 years of funding awards, scholarships, and grants has been that I-O psychology professionals are both the principal donors and also the creators of smarter workplaces.

Last October the trustees distilled the mission of the SIOP Foundation into a compact statement: Connecting donors with I-O psychology professionals to create smarter workplaces. The new statement really captures the essence of how the SIOP community develops, at least along one vector.

The clear mission in turn led to setting two goals for the coming fiscal year—by June 30, 2019:

1. Increase the annual number of donors from 200 to 400.
2. Increase the annual total of donations from $56K to $120K.

Special thanks go to **Stephen Cerrone**. In November he sent a check and a challenge to the Foundation: to think broadly and creatively about how to strengthen our applied organizational science.

The Trustees are now setting plans to meet Stephen's challenge while exceeding the two goals for SIOP Foundation's new fiscal year. We welcome your ideas.

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Nancy Tippins, Secretary, Nancy.Tippins@gartner.com
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Bill Macey, Trustee, wmacey9@gmail.com
John C. Scott, Trustee, JScott@APTMetrics.com

Membership Milestones

Jayne Tegge
SIOP Sr. Membership Specialist

Members are the heart and soul of SIOP and are greatly appreciated for their interest and contributions. An impressive list of distinguished members has been with the Society for 25 years or more. To recognize the contributions and loyalty of these dedicated members, SIOP has developed an initiative called the Sterling Circle. Sterling Circle members are honored in several ways and can be identified at SIOP events with a special ribbon on their badges. Learn more about the Sterling Circle here.

New Sterling Circle Members

David Campbell	Mary Taylor	John Younker
Matt Barney	Herbert Froehlich	Nisha Advani
Charles Handler	Melvin Holcom	James Lee
Angela Lynch	William Shepherd	Beverly Tarulli
Daniel Sachau	Marlene Burchfield Dunne	Adam Butler

> When I was a first-year doctoral student, my advisor, **Janet Barnes-Farrell,** encouraged me to join SIOP immediately and attend the conference the following spring. This was excellent advice, as I found the SIOP community highly supportive of doctoral students and extremely helpful as I transitioned into my early years as a faculty member in I-O psychology. SIOP has always been my "professional family" as a psychologist and will continue to be so.

Jeffrey M. Stanton
Associate Provost for Academic Affairs
Professor of Information Studies
Syracuse University

The life blood of any organization lies in attracting new members who bring a special enthusiasm and interest. Membership in SIOP is growing, and we take great pleasure in welcoming our newest members. They comprise a wonderful mix of former Student Affiliates upgrading to full membership and professionals, including those who previously were Associate members and International Affiliates. SIOP looks forward to these new members' participation on committees and conferences as they experience the value of membership in the premier organization for industrial and organizational psychologists.

New Professional Members

Richard Adderley	Paul Agnello	Michelle Albaugh
Laura Alderson	Loraine Allen	Alexandra Anos
Vanessa Appiah	Nicholas Arreola	Annie-Mariel Arroyo
Vincenza Asciutto	Devi Isabel Austin	Nida ul Habib Bajwa
Rebecca Baker	Prasad Balkundi	Donald Baptiste
Ashley Beaudoin	Amanda Bednar	Lauren Bell
Liz Berney	Allan Bird	Jordan Blackhurst
Chris Bordeaux	Laura Braeunig	Holly Brailsford
Kelcie Brielmaier	Nicole Brocaille	Andrew Brock

Jessica Brooks
Ashley Bugeja Vuu
Megan Burroughs
Sophia Carter
Kelly Charbonneau
Helen Chung
Lindsey Ciufia
Olivia Cooper
Jessica Craig
Renee Czeryba
Tonya Dawson
Mary Dolar
Ryan Dugan
Leila El-Hage
Matthew First
Amy Frost
Kelsey Garcia
Ephpraxia Georgakopoulou
Marla Gottschalk
Yadira Guerrero
Richard Hale
Jan Heimdal
Shannon Hoshauer
Monica Huff
Shannon Jennings
Michael Johnson-Hales
Kristy Jungemann
Katherine Kay
Mary Keeling
Christian Kiewitz
Lauren Kiproff
Jared Klotz
Fatos Kusari
Karyn Law
KiYoung Lee
Michael Linville
Rebecca Longman
Shoshana Magazine
Calie McAloon
Rehana Meghani
Destiny Mercado
Robert Moorman
Krystina Moustakis
Samir Nurmohamed
Yael Oelbaum
Zoa Ordonez
Ashlyn Patterson
Connor Pichette

Anna Brown
Lynette Buitt
Clinton Campbell
William Casper
David Chimitris
Matthan Churchill
Sarah Claiborne
Jason Copeland
Wayne Crawford
Patricia Dahm
Elzebir de Fuertes
Matthew Dreyer
Rebecca Early
Ben Fearing
Ute Fischer
Brenda Frye
Sean Gasperson
Katherine Giuca
Sarah Greene
Katrina Gurguis
Michele Hamm
Katharina Herde
Nicole Howland
Dennis Humphrey
Kelsey Johnson
Daniel Jones
Richard Justenhoven
Kristy Kay
Lauren Kenney
Joongseo Kim
Robert Klassen
Adrien Kollar
Karina Kuzemkina
Julia Lee
Sijia Li
Andreas Lohff
Jennifer Lorenz
Annette Maij-de Meij
Kelly McCann
Diana Mekarski
Mike Miller
Meghan Moriarty Gerrard
Chanda Murphy
Ronald Nwaru
Dunja Ognjenovic
Alejandra Ortiz-Reynoso
Kortney Peagram
Tiffany Pires

Jody Buck
Muneeb Bukhari
Caitlin Carney
Mushtaque Channa
Wonjoon Chung
Iulia Cioca
Helen Clark
Bennie Covington
Maribel Cruz
Audra Davis
Suzanne Dean
Mary Jo Ducharme
Janet Echemendia
Marcus Fila
William Fowler
Patrick Gallagher
Andrew Geissler
Jeffrey Godbout
Matthew Grossman
Rebecca Hagen
David Haxton
Thomas Holmes
Serena Hsia
Nicholas Ibacache
Lars Johnson
Lauren Jones
Debra Kalensky
Katherine Kearns
Uzair Khan
William King
Elyssa Klett
Bryan Krup
Paige Lancaster
Sunhee Lee
Marisa Licari
Erin Long
Dan Maday
Jacob Martin
Sarah McLaughlin
Hui Meng
James Moore
Sarah Morrisey
Maxwell Nicholson
Deena Oden
Whitney Ohmer
Kelsey Parker
Lindsay Perez
Mark Podolsky

Laura Quinn
Shweta Ramesh
Chelsey Read
Simon Restubog
Adam Roberts
Scott Ryan
Vick Sanchez
Joachim Schroer
Maurice Sipos
Kinsey Smith
Kristin Sowden
Craig Starbuck
Sarah Strahan
Hanying Tang
Trey Trainum
Kimberly Vela
Lotta Wallin
May Wasilewski
Michelle Weitzman-Garcia
Ian Wilson
John Wittgenstein
Keith Zabel
Johanna Rådeström
Shan Ran
Erika Reckert
Roman Rheingans-Carrion
Evelina Rogers
Ewa Rzepka
Pauline Schilpzand
Daniel Seto
Stephanie Sipos
Rena Sokol
Ryan Speckhart
Stephen Steiner
Ashley Sutton
Ningyu Tang
Julie Unite
Kristen Voetmann
Michael Ward
Joshua Weaver
Pamela Wells
Jodi Wilson
Xiaozhen Wu
Xichao Zhang
Archana Ramesh
Karen Rarick
Arthur Reese
Kelley Rizzo
Josh Rohlfs
Mike Sage
Charles Schmitt
Yashna Shah
Tom Skoglund
Zhaoli Song
Kelly Stallings
Tyler Stout
Natalie Szulyk
Sam Todd
Kaitlin Vaden
Curtis Walker
Enrique Washington
Stephanie Weddington
Jordan Whittenburg
Shannel Winslow
Amy Ye
Dianhan Zheng

IOTAs

David L. Tomczak
George Washington University

Honors and Awards

Dan Sachau and **Luke Simmering** published a chapter regarding the goal orientations of recreational golfers in the *Routledge International Handbook of Golf Science*.

James Dulebohn and **Dianna Stone** published *The Brave New World of eHRM 2.0*.

Benjamin Schneider was awarded the 2017 Walker Prize for the best article or commentary published in the *People + Strategy* journal that best advances state-of-the-art thinking or practices in human resources for his article "How Companies Can Really Impact Service Quality."

Transitions, New Affiliations, Appointments

Ryne Sherman joined Hogan Assessments as chief science officer.

Good luck and congratulations! Keep your colleagues at SIOP up to date. Send items for IOTAs to **Tara Behrend** at behrend@gwu.edu.